

777f

T A B L E S
OF
CORRECT AND CONCISE
LOGARITHMS;

FOR
NUMBERS, SINES, TANGENTS, SECANTS,
COMPLEMENTS-ARITHMETICAL, SUPPLEMENTS, &c.
Accurately deduced from Perfect Original Computations,
AND
Arranged after the best Manner for Use in the Sciences:

WITH A
COMPENDIOUS INTRODUCTION
TO
LOGARITHMETIC;
CONTAINING
SHORT AND PLAIN DIRECTIONS

FOR
Deducing NATURAL NUMBERS to Six Places of Figures,
the Log. Sines, Tangents, Secants and Versed Sines,
to SECONDS of a DEGREE;

THE
Natural Sines, Tangents, Secants, and Versed Sines,
to the like Accuracy;

AND
A Variety of LOGARITHMICAL THEOREMS,

APPLICABLE IN
Arithmetic, Geometry, Trigonometry, Navigation, Astronomy,
Surveying, Gunnery, the Discovery of the Longitude at Sea, &c.

By S A M U E L D U N N,
Teacher of the *Mathematics*, LONDON.

L O N D O N:

Printed for the AUTHOR, at No. 1, Boar's-head Court, Fleet-street
MDCCLXXXIV.

T A B L E
OF
CORRECT AND CONGRUENT
LOGARITHMS;

FOR
NUMBERS FROM ONE TO TEN THOUSAND.
COMPILED BY ADAM BELL, SURVEYOR GENERAL,
AND PUBLISHED BY J. BELL, STATIONER AND PRINTER,
IN THE CITY OF LONDON.



CONTAINING
LOGARITHMS
SHORT AND LONG

FOR
Deducing Natural Numbers to Six Places of Figures
the Logarithms of Tangents, Secants and Versed Sines
to Seconds of an Arc.

THE
Natural Cases of Tangents, Secants, and Versed Sines
to the Line of Numbers;

A Variety of Logarithmic Tables

AND
Tables for the Conversion of Time
and the Reduction of the Longitude

By
J. BELL, STATIONER AND PRINTER,
IN THE CITY OF LONDON.

LONDON:
Printed for J. BELL, STATIONER AND PRINTER,
IN THE CITY OF LONDON.

TO THE HONOURABLE
THE
COURT of DIRECTORS
OF THE
UNITED COMPANY
OF
MERCHANTS of ENGLAND
Trading to the EAST-INDIES,

(To whose Predecessors, One Hundred and Sixty-six Years since, under the Title of THE RIGHT HONOURABLE AND RIGHT WORSHIPFUL COMPANY OF MERCHANTS OF LONDON TRADING TO THE EAST-INDIES, the First Treatise on Logarithms, by the Lord Neper, as Translated and Improved by the Inventor of the True Sea Chart, under their Patronage, was Dedicated and Recommended as being useful in conducting the COMPANY'S SHIPS to and from the East-Indies)

THESE

TABLES of Correct and Concise LOGARITHMS,

Deduced wholly by the Author, with the utmost diligence and care, from the most perfect Original Computations; arranged after an improved manner, ready for use in Practical Astronomy, the discovery of the Longitude at Sea, and other Mathematical Sciences; and peculiarly designed for facilitating the Practice of the same to the Commanders and Officers of Ships in the COMPANY'S SERVICE;

With the greatest Deference and Respect, are

INSCRIBED,

By their most Obedient Humble Servant,

LONDON,
March 15, 1784.

SAMUEL DUNN.

[illegible]

Conducted wholly by the Nation, with the usual difference and
case, from the most perfect original, and the most perfect
after an improved manner, which has been in the National Assembly,
the discovery of the laws of the mind, and other well known
science, and particularly designed for facilitating the teaching
of the laws to the commandant and officers of ships in the
Country's service.

0-11-67

2. 1. 1954

COMPENDIOUS INTRODUCTION TO LOGARITHMETIC, &c.

SECTION I.

Of the Invention of Logarithms.

1. THE Logarithms were invented by John Lord Napier, Baron of Marchiston in Scotland, and in 1614, published by him in Latin, under the title of *Mirifici Logarithmorum Canonis Descriptio*; with their application to Trigonometry and the Doctrine of the Sphere, performing Multiplication by Addition, Division by Subtraction, Extraction of the Square and Cube Roots by dividing by two and three, and many other operations with ease and expedition, which by the common method were with great difficulty to be practised.

2. This Invention was so well received by the Mathematicians of that time, that they translated the work, and extended the plan which had been laid by the Inventor, so that at the end of twenty Years from the time of the first publication, there appeared as many different Treatises on the subject, among which were those by Mr. Edward Wright, Mr. Henry Briggs, Mr. John Speidell, Mr. Edmund Gunter, Mr. Edmund Wingate, Mr. Richard Norwood, Mr. Nathaniel Roe, Mr. Henry Gellebrand, of our own countrymen; and those by Mr. Benjamin Ursinius, Mr. John Kepler, Mr. D. Henrion, Mr. Adrian Vlac, Mr. Francis Cavalierius, Mr. Ludovicus Frobenius, and Pierre Herigone, who were Foreigners abroad.

3. According to the Inventor's original plan, any Series of Numbers beginning at 0, and increasing by equal Differences, may be called the Logarithms of a correspondent Series of Numbers in a continued Proportionality. Agreeable with this principle, he made 0 the Logarithm of Radius, diminished the Logarithms of the Sines as their Arches increased, and

thereby in three Columns, got Logarithms for Six sets of Numbers, namely, for Natural Sines and Co-sines, Tangents and Co-tangents, Secants and Co-secants.

4. This method of the Inventor was the shortest that has appeared; but it required the same readiness in adding and subtracting Affirmative and Negative Signs, that is necessary in Algebra; and therefore the Mathematicians of those times, with the approbation of the Inventor, altered the Logarithms of Numbers to that of the form intitled Common Logarithms, and those of the Circle, to the form intitled Log. Sines, Tangents, Secants, &c. both in this Work.

II.

Definitions concerning Logarithms.

1. Arithmetic is the Science of Numbers; Geometry the Science of Magnitudes; Mathematical Science is either Arithmetic or Geometry, or a Composition of both.

2. Natural Arithmetic is the Science of Numerical Computations by the pen, pencil or other marks of Numbers and such Principles as are remembered by the Computer.

3. Artificial Arithmetic is the Science of Computation by help of Numerical Tables adapted in a particular manner for shortening the Computations that would arise in Natural Arithmetic.

4. Natural Numbers are such as are either given or required, or that are in the calculation by Natural Arithmetic.

5. Artificial Numbers are such as are adapted to Natural Numbers, for bringing out solutions by Artificial Arithmetic.

6. Logarithms are Artificial Numbers placed in Tables opposite to the Natural Numbers

Numbers to which they belong, to be used in Artificial Arithmetic.

7. A Logarithm hath two Parts, which are separated from each other by a Point. The first or left hand part is the Index, the other is the Decimal Part of the Logarithm.

8. The Index is most commonly no more than one or two Figures. The Decimal Parts may be either as they are taken from the Tables, or contracted to a less Number of Places.

9. Natural Numbers are sometimes called Absolute Numbers; these may be either Whole Numbers, Vulgar Fractions, Decimals or Mixed; but operations are made most easily with their Logarithms, when they are either Whole Numbers or Decimals, or Compounded of both.

III.

Of Common Logarithms, their Indexes and Decimal Parts.

1. The Logarithms of Natural Numbers are here called Common Logarithms. Such Natural Numbers may begin at Unity, and increase in a successive order to ten, one hundred, a thousand, ten thousand, &c. Or they may decrease in a successive Order from Unity to a tenth, a hundredth, a thousandth, ten thousandth, &c. containing all intermediate Numbers between those extremes.

2. The Index of the Logarithm of a Natural Number is 0, when the Natural Number hath but one Figure of a Whole Number; but when it hath two or more Figures of Whole Numbers, subtract Unity from that Number, the Remainder is the Index. Otherwise, add Unity to the Index, and the Sum is the Number of Figures of Whole Numbers in the Natural Number to which it belongs.

3. The Decimal part of a Common Logarithm is the same whether the Natural Number to which it belongs be a Whole Number, a Decimal, or partly a Whole Number and partly a Decimal.

4. Whilst Logarithms are not wanted for Natural Numbers less than a single Figure of whole Numbers, the Indexes will be Affirmative; but when Indexes are to be written for Natural Numbers less than Unity, those Indexes will be Negative.

5. Affirmative Indexes are either written or supposed to be written with the Sign + plus. Negative Indexes are always written with the Sign — minus.

6. The Decimal part of a Common Logarithm, is always supposed to have the Sign plus; unless it becomes changed into minus, previous to any farther operation.

7. In a Table of Common Logarithms following each other in the order of the Table; As 100 is to the Difference of Logarithms, so is any Natural Number less than 100, to a fourth term, which is the Difference of Logarithms nearly for that additional Natural Number; and vice versa.

8. In the Linear Table for Proportional Parts, the two last Figures, to make Six in Natural Numbers, may be found thus. Find the Common Tabular Difference of Logarithms at the Side of the Linear Table, and with this, go toward the Centre till you come to a Parallel with any given less Difference of two given Logarithms (one of which is near that common Difference) and underneath are the two additional Figures for Natural Numbers required; & vice versa.

IV.

Of the Logarithmical Sines, Tangents, Secants; the Complements and Supplements.

1. The Radius of a Circle is supposedly divided into Ten Thousand Millions of equal Parts; and to this Radius the lengths of the Natural Sines, Natural Tangents and Natural Secants, are computed for every Minute of the Quadrant.

2. The Natural Sines, Tangents and Secants, are considered as Natural Numbers; and the Common Logarithms of them, are the Logarithmical Sines, Tangents and Secants.

3. By this wise institution of the Table, first, no Observation with the most perfect Instruments, can exceed the Subdivisions contained in the Table; and secondly, the Logarithms will always be free from Negative Indexes, which would be with some difficulty operated with Affirmative ones.

4. In the following Tables, both the Index and the Decimal Part of the Logarithm

arithm, are as they are to be taken out, opposite to each Minute of a Degree.

5. Complement, is the Remainder to Ninety Degrees. Supplement is the Remainder to One Hundred and Eighty Degrees.

6. Log. Sines, Tangents and Secants, for Arches and their Complements, are real; and those for Supplements, become applicable as though they were real, by reason of the original Analogies concerning Plain and Spherical Triangles. Those of Arches added to Ninety Degrees, neither exist, nor do they come into Operation with the usual Analogies.

V.

A Description of the Table of Common Logarithms in this Treatise.

1. The first page of this Table shews the Natural Numbers and their Logarithms opposite to each other, from Unity to Ninety-nine; the Index and Decimal Part, as they are to be taken out for use.

2. In the second Page, this Table begins in another and more concise form, with one Figure under N. for Natural Numbers, which go on in a successive order, and end at Nine hundred ninety-nine; the first right hand Figure of the Whole Number being placed at Top, and separated from two Cyphers following it by a Point.

3. At the right hand under D. are the Mean Differences of the intermediate Logarithms, answering to one Hundred, or Unity with the two Cyphers following them.

4. The Indexes of the Logarithms throughout this Table, are to be used as they are placed, when the Natural Numbers do not exceed Ten Thousand, whatever the Decimal Parts are for supplying the places of Tenths and Hundredths, filled in the places of the two Cyphers.

5. When five or six or more Figures of Whole Numbers are in the Natural Number, the Index must be greater than that in the Table, as before directed.

6. When (in the Natural Number) the first left hand Figure expresseth Tenths, the Index is Minus one; when it expresseth Hundredths, it is Minus two; when Thousandths, Minus three, &c. as in these Examples:

Natural Numbers. Logarithms.

9876.0000	3.99481
987.6000	2.99481
98.7600	1.99481
9.8760	0.99481
.9876	-1.99481
.09876	-2.99481
.009876	-3.99481

VI.

A Description of the Table of Log. Sines, Tangents, Secants, &c. in this Treatise.

1. The Quadrant begins with 0 Degrees at the Top of the Table on the Left, and under these Degrees, are the Minutes belonging to them. In the right hand corner at Top, in a smaller Character, is a Number standing for Degrees, and underneath are the Minutes answering thereto; these are the Supplements of the Degrees at Top, and may be taken out by inspection.

2. At the Bottom on the Right hand the Degrees are entitled, and over them are the Minutes belonging to them. On the left, at Bottom, in a smaller Character are Numbers standing for Degrees, and over them are the Minutes belonging to them; these are Supplements to the Degrees at Bottom on the Right hand, and their Minutes.

3. The entitled Degrees in opposite Corners of the page and their Minutes, are Complements to each other. The entitled and unentitled Degrees, over each other, are, the one under, and the other as much above a Quadrant.

4. The Sines, Co-sines, Tangents, Co-tangents, Secants, Co-secants, and Complements-arithmetical, entitled at Top, belong to the entitled Degrees and unentitled Supplements at Top. Those at Bottom belong to the Degrees and their Supplements at Bottom.

5. The Co-ar. or Complement-arithmetical is the Co-secant, having its Index lessened by Ten; the Secant less Radius, is had by omitting its Index Ten. Consequently,

6. From these Tables, there may be taken out by Inspection, to the nearest Half Minute of a Degree, the Sines and Co-sines, Tangents and Co-tangents, Secants and Co-secants, Secants less Radius

Radius and Complements-arithmetical; for Arches, their Complements, Supplements, and Arches added to Ninety.

VII.

General Properties of the Log. Sines, Tangents, Secants, &c. of Use in Verifying the Truth of the Tables.

1. The Sine and Co-secant together in one Sum, make Index Twenty, without any Decimal Part.

2. The Co-sine and Secant together, make Index Twenty.

3. The Tangent and Co-tangent together, make Index Twenty.

4. To the Log. Sine add Radius (or Index Ten) and from the sum subtract the Log. Tangent; the Remainder is the Log. Co-sine.

5. To the Log. Sine add Radius, and from the Sum subtract the Log. Co-sine; the Remainder is the Log. Tangent.

6. To the Log. Co-sine add Radius; and from the Sum subtract the Log. Sine; the Remainder is the Log. Co-tangent.

7. To the Log. Co-sine add Radius; and from the Sum subtract the Log. Co-tangent; the Remainder is the Log. Sine.

8. To the Log. Co-tangent add the Log. Sine, and from the Sum subtract Radius; the Remainder is the Log. Co-sine.

9. To the Log. Co-sine add the Log. Tangent, and from the Sum subtract Radius; the Remainder is the Log. Sine.

VIII.

Properties of the Log. Versed Sines.

1. Take Half of a given Arch, and add together, the double of the Log. Sine of that Half, and the Logarithm of Two (namely, 0, 301030) omit Radius in the Sum, and it is the Log. Versed Sine of the given Arch.

2. Take Half of a given Arch, double the Log. Sine of that Half, and from this double subtract 9.698970; the Remainder is the Log. Versed Sine of the given Arch.

These two Constant Logarithms, make Radius or Index Ten. If the Arch is greater than a Quadrant, use its Supplement.

3. To the Log. Versed Sine of an Arch, add Radius, and from the Sum, subtract 0.301030; take Half of the Remainder, and it is the Log. Sine of an Arch, which Arch being doubled, it is the Arch of the given Log. Versed Sine.

4. To the Log. Versed Sine of an Arch, add 9.698970, take Half of the Sum, and it is the Log. Sine of an Arch, which Arch being doubled, it is the Arch of the given Log. Versed Sine.

IX.

Of the Short Table at the Bottom of every Page of the Log. Sines, Tangents, Secants, &c.

1. This Table shews the Mean Differences of Logarithms for Sines, Co-sines and Tangents, for every Sixty Seconds in the Middle of the same Page; and consequently, it shews the like for the Co-tangents, Secants, Co-secants and Complements-arithmetical.

2. From Sixty Seconds, it descends to the Lower Classes of Tens and Units, to a Second; for taking out the Seconds when Logarithmic Differences are given, or the Proportional Parts of Logarithmic Differences when the Seconds are given, by Inspection.

3. Near the Beginning of the Quadrant the Differences of the Sines and Tangents for Sixty Seconds, from one Degree to the next following, are much greater than toward the End or Middle of the Quadrant; to correct the Error that may arise from this, a Table is at the End of the Log. Sines, Tangents, Secants, &c. for getting the nearest Second by Inspection.

4. The Logarithmic Differences, likewise their correspondent Seconds of a Degree, are either additive to, or subtractive from the Sines, Co-sines; Tangents, Co-tangents; Secants, Co-secants; Complements-arithmetical and Secants less Radius, or their Correspondent Arches; as they increase or decrease, the Order of which is shewn by the Numbers in the respective Columns.

5. When the greatest exactness is required, the Common Difference of Logarithms is to Sixty Seconds, as the Difference between a given Logarithm and one

near

near it in the Table, is to the additional Number of Seconds; and vice versa. Or more easily thus:

6. Take the Common Difference for Seconds, from the Table of Proportional Differences, find it at the Side of the Linear Table, and go therewith toward the Centre, till you come to a Parallel of the same Side equal to a given less Difference of Logarithms, and underneath are the Seconds additional required; & vice versa.

X.

Of the Addition and Subtraction of Affirmative and Negative Signs.

1. Like Signs are such as are either all affirmative or all negative; unlike Signs are such as are partly affirmative and partly negative.

2. The Aggregate or Total of Numbers with like Signs, is their Sum. The Aggregate or Total of two Numbers, with unlike Signs, is their Difference, having the Sign of the greatest of them.

3. When unlike Signs are in more than two Numbers, they are brought to two Numbers, by taking the Sum of those with plus, and the Sum of those with minus.

XI.

Of the Terms in Arithmetical Rules.

1. In Multiplication, there are Multiplicand, Multiplier, and Product.

2. In Division, there are Dividend, Divisor and Quotient.

3. In Direct Proportionality, there are the first, second and third terms given, to find a fourth.

4. In the Square Root; the Root multiplied by itself, gives the Square.

5. In the Cube Root; the Root multiplied by itself, and that Product by the Root, gives the Cube.

6. In continued Proportionality; the Ratio (or Multiple) between any two Terms following each other, is the same.

7. To increase a Square any Number of times, is to find the Square Root of a Square, which is increased that Number of times.

8. To increase a Cube any Number of times, is to find the Cube Root of a

Cube, which is increased that Number of times.

XII.

Multiplication by Logarithms.

1. The Aggregate or Amount of the Logarithms of the Multiplicand and Multiplier, is the Logarithm of the Product.

2. The Aggregate of the Decimal Parts of Logarithms and their Overplus Ten or Tens, is affirmative, and must be carried as such to the Sum or Difference of the Indexes, to get the Total.

EXAMPLE 1.

Mult. 785.2 Log. 2.894980
By 32.64 Log. 1.513750
Prod. 25628.9 Log. 4.408730

EXAMPLE 2.

Mult. 785.2 Log. 2.894980
By .003264 Log. —3.513750
Prod. .2563 Log. 0.408730

EXAMPLE 3.

Mult. .7852 Log. —1.894980
By .003264 Log. —3.513750
Prod. .002563 Log. —3.408730

XIII.

Raising of Powers by Logarithms.

1. Double the Logarithm of a Number is the Logarithm of its Square.

2. Treble the Logarithm of a Number is the Logarithm of its Cube.

3. Four times, five times, &c. gives the Logarithms of the fourth, and fifth Powers, &c.

4. Here due regard must be had to what hath been said of the Index and Decimal Part.

EXAMPLE 1.

No. 64.61 Log. 1.810300.
Square 4174.45 Log. 3.620600.

EXAMPLE 2.

No. 250. Log. 2.397940.
Cube 15625000. Log. 7.193820.

EXAMPLE 3.

No. .0259 Log. —2.413300.
Cube .00001737 Log. —5.239900

XIV.

Division by Logarithms.

1. The Difference between the Logarithms of the Dividend and Divisor, is the Logarithm of the Quotient.

2. The Index and Decimal Part of the Difference (or Remainder) must be such, that

A COMPENDIOUS INTRODUCTION

that they being added to the Logarithm of the Divisor, the Aggregate or Amount is the Logarithm of the Dividend.

EXAMPLE 1.

Dividend 2568.9 Log. 4.408730
 Divisor 32.64 Log. 1.513750
 Quotient 785.2 Log. 2.894980

EXAMPLE 2.

Dividend 2.563 Log. 0.408730
 Divisor 785.2 Log. 2.894980
 Quotient .00264 Log. -3.513750

EXAMPLE 3.

Dividend .002563 Log. -3.408730
 Divisor .00264 Log. -3.513750
 Quotient 785.2 Log. -1.894980

XV.

Extraction of Roots by Logarithms.

1. Half the Logarithm of a Number, is the Logarithm of its Square Root.

2. One third of the Logarithm of a Number, is the Logarithm of its Cube Root.

3. A fourth, a fifth, &c. of the Logarithm of a Number, is the Logarithm of its fourth, and fifth Roots, &c.

Here due regard must be had to what has been said of the Index.

EXAMPLE 1.

No. 4174.45 Log. 3.620600
 Square Root 64.61 Log. 1.810300

EXAMPLE 2.

No. 15625000. Log. 7.199820
 Cube Root 250. Log. 2.397940

EXAMPLE 3.

No. .0000737 Log. -5.239900
 Cube Root .0259 Log. -1.413300

XVI.

Direct Proportionality by Logarithms.

1. Add together the Logarithms of the second and third Terms, and from the Sum subtract the Logarithm of the first Term, the Remainder is the Logarithm of the fourth Term.

EXAMPLE 1.

As 77.53 Log. 1.890479
 To 77.22 Log. 1.887730
 So 32.64 Log. 1.513750
 Sum 3.409880

To 51.6095 Log. 1.712010

EXAMPLE 2.

As 77.53 Log. 1.890479
 To 77.22 Log. 1.887730
 So 32.64 Log. 1.513750
 Sum 1.401480

To 32.51 Log. -1.512010

XVII.

Having two Extremes of a Series of Numbers increasing in continued Proportionality, to find any Number of intermediate Terms between them.

1. Take the Difference of the Logarithms of the two Extremes; then,

If one Mean is to be found, half that Difference added to the Logarithm of the first, gives the Logarithm of the second Term.

If two Means are to be found; a Third of that Difference added to the Logarithm of the first, gives the Logarithm of the second Term.

If three Means, a fourth, &c.

2. The same Difference added to the second, gives the Logarithm of the third Term, and so on to any Number of Terms.

XVIII.

To make Operations by Logarithms, without introducing Negative Indexes.

1. Increase or suppose to be increased, the Value of each of the Natural Numbers that are to be operated, either ten, or one hundred, or one thousand, &c. times, at discretion; to such height, that with proper Indexes to them newly assigned, the Logarithm of the Answer may come out with an Affirmative Sign.

2. Take out the Natural Number answering to this Logarithm, and lessen it by cutting off tenths, hundredths, thousandths, &c. as the case requires, and it is the Answer.

XIX.

To take out the Natural Sines, Tangents, Secants and Versed Sines; when their Logarithmical ones are given.

1. Subtract Index Six from the Index in the Table of Log. Sines, Tangents, Secants, &c. and the like from the Index of a given Versed Sine deduced from the same Table, and with the Remainder, from the Table of Common Logarithms, take out the Natural Number, and it is the Natural Sine, Tangent, Secant or Versed Sine required, to the Radius Ten thousand.

2. Subtract Index Five, in the same manner; and the like is had to the Radius One hundred thousand.

3. Subtract Index four in the same manner

manner; and the like is had to the Radius One million.

4. The Tangent of Half of the Quadrant is Radius. The Secant of 0 Degrees is Radius.

5. The Natural Number of the Co-sine, subtracted from Radius; there remains the Natural Versed Sine of the same Arch; and its Logarithm is the Log. Versed Sine.

6. As the Co-sine is to the Sine; so is the Versed Sine to a Natural Number; which being added to the Natural Sine, is the Natural Tangent, when the Arch exceeds Half of the Quadrant.

7. As the Co-sine is to the Radius; so is the Versed Sine to a Natural Number; which being added to Radius, is the Natural Secant, whether the Arch is more or less than Half of the Quadrant.

XX.

Of Duplicate and Triplicate Ratio.

1. Duplicate Ratio holds good between the Squares of the Sides and the Areas of all Plane Figures, which are Equiangular and have Proportional Sides.

2. Triplicate Ratio holds good between the Cubes of the Sides, and the Solidities of all Solids, which are Equiangular, and have Proportional Sides.

XXI.

Definitions and Theorems of Plane Trigonometry.

1. In a Right-angled Plane Triangle, the longest Side is the Hypotenuse, the shortest Side the Perpendicular, the other Side the Base.

2. In any other Plane Triangle, the longest Side is the Base; the other Sides are the two Legs. The Perpendicular falls from the greatest Angle perpendicularly on the Base, dividing it into its greater and lesser Segments. The Altern Base is the Difference of the Segments.

3. In a Right-angled Plane Triangle; the Hypotenuse, Base and Perpendicular, are to each other respectively, as the Radius, Sine, Co-sine, Tangent or Secant respectively, which they represent when any one of the Angular Points is made the Centre of a Circle.

4. In all Plane Triangles, the Sides are in Direct Proportionality to each other, as the Sines of their opposite Angle.

5. In all Plane Triangles, one of the Angles being subtracted from One hundred and eighty Degrees, leaves the Sum of the other Angles, and half this is their Half Sum; consequently,

6. The two lesser Angles of a Right-angled Plane Triangle, are Complements to each other.

7. In all Plane Triangles; as Half the Sum of two Sides, is to Half their Difference, so is the Tangent of Half the Sum of their opposite Angles, to the Tangent of Half the Difference of those Angles.

The Half Difference added to the Half Sum, gives the greater Angle, and subtracted from the Half Sum leaves the lesser Angle.

8. In any Plane Triangle; as Half the Base is to Half the Sum of the Legs, so is Half the Difference of the Legs to Half the Altern Base.

Half the Altern Base added to Half the Base, gives the greater Segment; and subtracted gives the lesser Segment.

XXII.

Definitions and Theorems of Spherical Trigonometry.

1. In a Right-angled Spherical Triangle; the longest Side is the Hypotenuse, the shortest Side the Perpendicular, the other Side the Base.

2. In any other Spherical Triangle; the longest Side is the Base, the other Sides are the two Legs. The Perpendicular falls from the greatest Angle perpendicularly on the Base, dividing it into its greater and lesser Segments. The Altern Base is the Difference of the Segments.

3. In a Right-angled Spherical Triangle, the Right Angle is rejected as Nothing; then, the Complement of the Hypotenuse, the Complement of the Angle at the Base, the Complement of the Angle at the Perpendicular, the Base, and the Perpendicular; these make the Five Circular Parts.

4. The Log. Sine of a Middle Part added to Index Ten, makes the Sum of the Log. Tangents of the two next adjoining Circular Parts; also, it makes the Sum of the Log. Co-sines of the two Circular Parts which are not next adjoining.

5. In all Spherical Triangles; the Sines of the Sides are in Direct Proportionality to each other, as the Sines of their opposite Angles.

6. In all Spherical Triangles; as the Co-sine of Half the Sum of two Sides, is to the Co-sine of Half their Difference, so is the Co-tangent of Half the included Angle, to the Tangent of Half the Sum of the opposite Angles. And,

As the Tangent of Half the Sum of the two Sides is to the Tangent of Half their Difference; so is the Tangent of Half the Sum of the opposite Angles, to the Tangent of Half their Difference.

The Half Difference added to the Half Sum, gives the greater Angle opposite to the greater Side; and subtracted, leaves the lesser Angle opposite to the lesser Side.

7. In any Spherical Triangle; as the Tangent of Half the Base, is to the Tangent of Half the Sum of the Legs; so is the Tangent of Half the Difference of the Legs, to the Tangent of Half the Altern Base.

Half the Altern Base, added to Half the Base, gives the greater Segment; and subtracted, gives the lesser Segment.

8. In any Spherical Triangle, whose three Sides are given to find an Angle;

Add together the Complements-arithmetical of the two Sides including the required Angle, the Log. Sine of Half the Sum of the three Sides, the Log. Sine of the Difference between the Half Sum and the Side opposite to the Angle sought; Half the Sum of these four Logarithms is the Co-sine of an Arch, which Arch being doubled is the Angle sought.

9. In any Spherical Triangle, whose three Sides are given to find an Angle;

Take Half the Difference of the Sides including the Angle sought, add it to Half the Side opposite to the Angle sought, and call it the Sum. Subtract this Half Difference from the Side opposite to the Angle sought, and call it the Remainder.

Add together the Complements-arithmetical of the Sides including the Angle sought, the Log. Sines of the Sum and Remainder; take Half the Sum of these

four Logarithms, and it is the Log. Sine of an Arch, which Arch being doubled is the Angle sought.

10. In any Spherical Triangle, whose Sides are given to find an Angle;

Take the Difference between each of the Sides including the Angle sought, and the Half Sum of the three sides, and call them the two Remainders.

Add together the Complements-arithmetical of the containing Sides, and the Log. Sines of the two Remainders, Half the Sum of these four Logarithms is the Log. Sine of an Arch, which Arch being doubled, is the Angle sought.

XXIII.

Theorem for finding the third Side of a Spherical Triangle, by applying the Versed Sines; when the two Sides and the Angle between them are given.

1. Add together the Log. Sines of the containing Sides, and the Log. Versed Sine of the Angle between them, and find the Natural Number answering to their Sum. Take the Natural Number answering to the Natural Co-sine of the Arch of Difference between the two Sides; and the Difference between these two Natural Numbers is the Natural Co-sine of the third Side.

2. Add together the Log. Sines of the containing Sides, and the Log. Versed Sine of the Angle between them, and find the Natural Number answering to the Sum. Add this to the Natural Versed Sine of the Arch of Difference between the two Sides; and the Sum is the Natural Versed Sine of the third Side.

3. When the Angle is under Ninety Degrees, add together the Log. Versed Sine of the contained Angle, and the Log. Sines of the two containing Sides, omit Index Twenty in the Sum, and it is the Logarithm of a Natural Number; which being found and added to the Natural Versed Sine of the Arch of Difference between the Sides, the Sum is the Natural Versed Sine of the third Side.

4. When the Angle is above Ninety Degrees, add together the Log. Versed Sine of the Supplement of the contained Angle, and the Log. Sines of the two Sides, omit Index Twenty in the Sum, and it is the Logarithm of a Natural Number.

Number, which being found and subtracted from the Natural Versed Sine of the Sum of the Sides, the Remainder is the Natural Versed Sine of the third Side.

XXIV.

Given two Latitudes and their Difference of Longitude to find the Course and Distance.

1. Take the Difference of the Log. Tangents of Half the Complements of the two Latitudes, and cut off the two Right-hand Figures as Decimals. Take the Common Logarithm of this Difference and subtract it from Index Ten, the Remainder is its Co. Log. Add together this Co. Log. the Common Logarithm of the Minutes of Difference of Longitude, and this constant Logarithm 10.101510; the Sum abating Radius, is the Log. Tangent of the Course.

2. To the Log. Secant of the Course, add the Common Logarithm of the Difference of Latitudes in Minutes, the Sum abating Radius, is the Common Logarithm of the Distance in Miles.

XXV.

Given two Latitudes and the Course, to find the Difference of Longitude.

1. Take the Difference of the Log. Tangents of Half the Complements of the two Latitudes, and cut off the two Right-hand Figures as Decimals. Add together the Common Logarithm of this Difference, the Log. Tangent of the Course, and this Constant Logarithm 9.898490; the Sum abating Radius, is the Common Logarithm of the Difference of Longitude in Minutes.

In these Cases, the Latitudes are to be reckoned from one and the same Pole of the Earth; therefore, when one Latitude is North and the other South, the Complements are had by subtracting one from Ninety Degrees, and adding the other to Ninety Degrees.

XXVI.

Problems in Astronomy, easily to be solved by the Log. Sines, Tangents, Secants, &c.

1. As the Co-sine of the Latitude, is to Radius, so is the Sine of the Sun's Declination, to the Sine of the true Amplitude of Rising or Setting, Northwardly from the true East and true West when the

Declination is North; but Southwardly when the Declination is South.

2. Add together, the Co-latitude, the Polar Distance, and Co-altitude; take Half their Sum, and from the Half Sum subtract the Co-altitude to get a Remainder. Then,

Add together, the Co-ar. of the Co-latitude, the Co-ar. of the Polar-distance, the Sine of the Half Sum, and the Sine of the Remainder; Half the Sum of these four Logarithms, is the Co-sine of an Arch, which Arch being doubled, is the Hour-angle in Degrees and Minutes, either past or short of Noon.

3. Add together the Co-latitude, the Polar-distance, and Co-altitude; take Half their Sum, and from the Half Sum subtract the Co-latitude, likewise the Polar-distance, to get two Remainders.

Add together the Co-ar. of the Co-latitude, the Co-ar. of the Polar-distance, and the Sines of the two Remainders; Half the Sum of these four Logarithms is the Sine of an Arch, which Arch being doubled, is the Hour-angle in Degrees and Minutes, either past or short of Noon.

4. To find the true Azimuth, or Horizontal-distance from the Point under the Elevated Pole.

Begin with the Co-latitude, Co-altitude, and Polar-distance, and go on with them, the Co-ar. of the Co-latitude, the Co-ar. of the Co-altitude, &c. in either of the above Theorems.

XXVII.

Problems in Land-Surveying, easily computed by Logarithms.

1. Add together the Logarithm of the Base of a Plane Triangle, and the Logarithm of its Perpendicular; the Sum is the Logarithm of the Double Area.

2. Add together the Logarithms of the two Sides of a Plane Triangle, and the Log. Sine of the Angle between them; the Sum is the Logarithm of the Double Area.

3. In Surveying, Dimensions are taken by the Four-pole Chain of One hundred Links. In computing the Dimensions, the Chains and Links are expressed in Links, and the Indexes of the Logarithms accordingly; so the Area is found in Square

Square Links, and five Figures cut off to the right for Decimals, leaves the left hand Figures Acres.

XXVIII.

Problems in Gunnery, easily computed by Logarithms.

1. Elevation, is the Number of Degrees and Minutes, which a Piece of Ordnance is directed above the Horizon.

2. Impetus, is the greatest Height in a Perpendicular Direction; that a Piece of Ordnance throws a Body, with a given Charge of Powder.

3. Amplitude, Range or Random, is the Distance to which a Body is thrown on an Horizontal Plane.

4. The greatest Amplitude, is with an Elevation of Half the Quadrant.

5. The Impetus is Half of the greatest Amplitude.

6. The Amplitudes will be nearly the same when the Elevations are as much above, as under Half of the Quadrant.

7. The Resistance of the Air has least effect on the heaviest Shot; and the same Piece is supposed to be always charged with the same Quantity of Powder. Then,

8. As Radius, to the greatest Amplitude; so is the Sine of twice an Elevation, to the Amplitude with that Elevation.

9. As the greatest Amplitude is to Radius; so is any other Amplitude, to the Sine of an Angle, Half of which is the Elevation.

This Angle, in great Elevations, will be a Supplement in the Table.

10. As the Sine of Double the Angle of Elevation, is to the Amplitude; so is Radius, to the greatest Amplitude.

Half of this Amplitude is the Impetus.

11. As the Sine of Double one Elevation, is to its Amplitude; so is the Sine of Double another Elevation, to its Amplitude.

12. As the Versed Sine of the Double of one Angle of Elevation, is to the Altitude with that Elevation; so is the Versed Sine of the Double of another Angle of Elevation, to its Altitude.

13. As the Sine of one Elevation, is to the Time of its Flight; so is the Sine of another Elevation, to the Time of its Flight.

XXIX.

Having two Altitudes of the Sun's Centre, cleared from Semidiameter, Dip and Refraction, and taken between Nine in the Morning and Three Afternoon, the Solar Time measured between the Observations, the Sun's Declination, and Latitude somewhat near the truth; to find the true Latitude. Add together as follows,

1. Log. Co-sine of Half Sum of Altitudes,
 2. Log. Sine of Half Difference of Altitudes,
 3. Co-ar. of Half Elapsed Time,
 4. Secant less Radius of Declination,
 5. Secant less Radius of given Latitude,
- In the Sum reject Index Ten; Remainder is Log. Sine of Middle Time from Noon.

Take the Difference between this Middle Time and Half of the Elapsed Time, and take Half of the Remainder.

Then, add together as follows,

6. Twice the Log. Sine of the Half Remainder,
 7. This constant Logarithm 0.301030,
 8. Log. Co-sine of the Declination,
 9. Log. Co-sine of the given Latitude.
- In the Sum, reject Index Thirty, the Remainder is a Common Logarithm, whose Natural Number added to the Natural Sine of the greatest Altitude, gives the Natural Sine of the Meridian Altitude.

XXX.

To find the Moon's Parallax in Altitude.

As Radius, to Co-sine of the Moon's Altitude observed; so is her Horizontal Parallax in Seconds, to her Parallax in Altitude in Seconds.

XXXI.

To find the Longitude at Sea.

1. Having the Sun or Star's Altitude, and the Moon's Altitude, both as observed, clear them from Dip, Refraction and Parallax in Altitude, and get their true Co-altitudes cleared of these.

2. By the two Altitudes as observed, and the Distance observed, get the Zenith Angle, with which and the two cleared Co-altitudes, get the true Distance of Centres; and by this the Time at Greenwich.

3. By the Latitude, Declination and Altitude of the Sun, get the Time at the Ship; and what it differs from the Time at Greenwich is the Longitude.

THE
TABLES of LOGARITHMS,
 Improved by S. DUNN.

Num. Logar.	Num. Logar.	Num. Logar.
10.000000	34.1.531479	67.1.826075
20.301030	35.1.544068	68.1.832509
30.477121	36.1.556303	69.1.838849
40.602060	37.1.568202	70.1.845098
50.698970	38.1.579784	71.1.851258
60.778151	39.1.591065	72.1.857332
70.845098	40.1.602060	73.1.863323
80.903090	41.1.612784	74.1.869232
90.954243	42.1.623249	75.1.875061
100.000000	43.1.633468	76.1.880814
110.041393	44.1.643453	77.1.886491
120.079181	45.1.653213	78.1.892095
130.1113943	46.1.662758	79.1.897627
140.1.146128	47.1.672098	80.1.903090
150.1.176091	48.1.681241	81.1.908486
160.1.204120	49.1.690196	82.1.913814
170.1.230449	50.1.698970	83.1.919078
180.1.255273	51.1.707570	84.1.924279
190.1.278754	52.1.716003	85.1.929419
200.1.301030	53.1.724276	86.1.934498
210.1.322219	54.1.732394	87.1.939519
220.1.342423	55.1.740363	88.1.944483
230.1.361728	56.1.748188	89.1.949390
240.1.380211	57.1.755875	90.1.954243
250.1.397940	58.1.763428	91.1.959041
260.1.414973	59.1.770852	92.1.963788
270.1.431364	60.1.778151	93.1.968483
280.1.447158	61.1.785330	94.1.973128
290.1.462398	62.1.792392	95.1.977724
300.1.477121	63.1.799341	96.1.982271
310.1.491362	64.1.806180	97.1.986772
320.1.505150	65.1.812913	98.1.991226
330.1.518514	66.1.819544	99.1.995635

Common Logarithms.

N.	0.00	1.00	2.00	3.00	4.00
0		0.000000	0.301030	0.477121	0.602060
1	1.000000	1.041393	1.079181	1.113943	1.146128
2	1.301030	1.322219	1.342423	1.361728	1.380211
3	1.477121	1.491362	1.505150	1.518514	1.531479
4	1.602060	1.612784	1.623249	1.633468	1.643453
5	1.698970	1.707570	1.716003	1.724276	1.732394
6	1.778151	1.785330	1.792392	1.799341	1.806180
7	1.845098	1.851258	1.857332	1.863323	1.869232
8	1.903090	1.908485	1.913814	1.919078	1.924279
9	1.954243	1.959041	1.963788	1.968483	1.973128
10	2.000000	2.004321	2.008600	2.012837	2.017033
11	2.041393	2.045323	2.049218	2.053078	2.056905
12	2.079181	2.082785	2.086360	2.089905	2.093422
13	2.113943	2.117271	2.120574	2.123852	2.127105
14	2.146128	2.149219	2.152288	2.155336	2.158362
15	2.176091	2.178977	2.181844	2.184691	2.187521
16	2.204120	2.206826	2.209515	2.212188	2.214844
17	2.230449	2.232996	2.235528	2.238046	2.240549
18	2.255273	2.257679	2.260071	2.262451	2.264818
19	2.278754	2.281033	2.283301	2.285557	2.287802
20	2.301030	2.303196	2.305351	2.307496	2.309630
21	2.322219	2.324282	2.326336	2.328380	2.330414
22	2.342423	2.344392	2.346353	2.348305	2.350248
23	2.361728	2.363612	2.365488	2.367356	2.369216
24	2.380211	2.382017	2.383815	2.385606	2.387390
25	2.397940	2.399674	2.401401	2.403121	2.404834
26	2.414973	2.416641	2.418301	2.419956	2.421604
27	2.431364	2.432969	2.434569	2.436163	2.437751
28	2.447158	2.448706	2.450249	2.451786	2.453318
29	2.462398	2.463893	2.465383	2.466868	2.468347
30	2.477121	2.478566	2.480007	2.481443	2.482874
31	2.491362	2.492760	2.494155	2.495544	2.496930
32	2.505150	2.506505	2.507856	2.509203	2.510545
33	2.518514	2.519828	2.521138	2.522444	2.523746
34	2.531479	2.532754	2.534026	2.535294	2.536558
35	2.544068	2.545307	2.546543	2.547775	2.549003
36	2.556303	2.557507	2.558709	2.559907	2.561101
37	2.568202	2.569374	2.570543	2.571709	2.572872
38	2.579784	2.580925	2.582063	2.583199	2.584331
39	2.591065	2.592177	2.593286	2.594393	2.595496

Common Logarithms.

3

5.00	6.00	7.00	8.00	9.00	D.
0.698970	0.778151	0.845098	0.903090	0.954243	
1.176091	1.204120	1.230449	1.255273	1.278754	
1.397940	1.414973	1.431364	1.447158	1.462398	
1.544068	1.556303	1.568202	1.579784	1.591065	
1.653213	1.662758	1.672098	1.681241	1.690196	
1.740363	1.748188	1.755875	1.763428	1.770852	
1.812913	1.819544	1.826075	1.832509	1.838849	
1.875061	1.880814	1.886491	1.892095	1.897627	
1.929419	1.934498	1.939519	1.944483	1.949390	
1.977724	1.982271	1.986772	1.991226	1.995635	
2.021189	2.025306	2.029384	2.033424	2.037426	4117
2.060698	2.064458	2.068186	2.071883	2.075547	3760
2.096910	2.100371	2.103804	2.107210	2.110590	3461
2.130334	2.133539	2.136721	2.139879	2.143015	3206
2.161368	2.164353	2.167317	2.170262	2.173186	2985
2.190332	2.193125	2.195900	2.198657	2.201397	2793
2.217484	2.220108	2.222716	2.225309	2.227887	2624
2.243038	2.245513	2.247973	2.250420	2.252853	2475
2.267172	2.269513	2.271842	2.274158	2.276462	2341
2.290035	2.292256	2.294466	2.296665	2.298853	2221
2.311754	2.313867	2.315970	2.318063	2.320146	2113
2.332438	2.334454	2.336460	2.338456	2.340444	2015
2.352183	2.354108	2.356026	2.357935	2.359835	1926
2.371068	2.372912	2.374748	2.376577	2.378398	1844
2.389166	2.390935	2.392697	2.394452	2.396199	1769
2.406540	2.408240	2.409933	2.411620	2.413300	1700
2.423246	2.424882	2.426511	2.428135	2.429752	1636
2.439333	2.440909	2.442480	2.444045	2.445604	1576
2.454845	2.456366	2.457882	2.459392	2.460898	1521
2.469822	2.471292	2.472756	2.474216	2.475671	1470
2.484300	2.485721	2.487138	2.488551	2.489958	1422
2.498311	2.499687	2.501059	2.502427	2.503791	1377
2.511883	2.513218	2.514550	2.515874	2.517196	1334
2.525045	2.526339	2.527630	2.528917	2.530200	1294
2.537819	2.539070	2.540329	2.541579	2.542825	1257
2.550228	2.551450	2.552668	2.553883	2.555094	1222
2.562293	2.563481	2.564666	2.565848	2.567026	1188
2.574031	2.575188	2.576341	2.577492	2.578639	1157
2.585461	2.586587	2.587711	2.588832	2.589950	1127
2.596597	2.597695	2.598791	2.599883	2.600973	1098

N.	0.00	1.00	2.00	3.00	4.00
40	2.602060	2.603144	2.604226	2.605305	2.606381
41	2.612784	2.613842	2.614897	2.615950	2.617000
42	2.623249	2.624282	2.625312	2.626340	2.627366
43	2.633468	2.634477	2.635484	2.636488	2.637490
44	2.643453	2.644439	2.645422	2.646404	2.647383
45	2.653212	2.654177	2.655138	2.656098	2.657056
46	2.662758	2.663701	2.664642	2.665581	2.666518
47	2.672098	2.673121	2.673942	2.674861	2.675778
48	2.681241	2.682145	2.683047	2.683947	2.684845
49	2.690196	2.691081	2.691965	2.692847	2.693727
50	2.698970	2.699838	2.700704	2.701568	2.702431
51	2.707579	2.708421	2.709270	2.710117	2.710963
52	2.716003	2.716838	2.717671	2.718502	2.719331
53	2.724276	2.725095	2.725912	2.726727	2.727541
54	2.732394	2.733197	2.733999	2.734800	2.735599
55	2.740363	2.741152	2.741939	2.742725	2.743510
56	2.748188	2.748963	2.749736	2.750508	2.751279
57	2.755875	2.756636	2.757396	2.758155	2.758912
58	2.763428	2.764176	2.764923	2.765669	2.766413
59	2.770852	2.771587	2.772322	2.773055	2.773786
60	2.778151	2.778874	2.779596	2.780317	2.781037
61	2.785330	2.786041	2.786751	2.787460	2.788168
62	2.792392	2.793092	2.793790	2.794488	2.795185
63	2.799341	2.800029	2.800717	2.801404	2.802089
64	2.806180	2.806858	2.807535	2.808211	2.808886
65	2.812913	2.813581	2.814248	2.814913	2.815578
66	2.819544	2.820201	2.820858	2.821514	2.822168
67	2.826075	2.826723	2.827369	2.828015	2.828660
68	2.832509	2.833147	2.833784	2.834421	2.835056
69	2.838849	2.839478	2.840106	2.840733	2.841359
70	2.845098	2.845718	2.846337	2.846955	2.847573
71	2.851258	2.851870	2.852480	2.853090	2.853698
72	2.857332	2.857935	2.858537	2.859138	2.859739
73	2.863323	2.863917	2.864511	2.865104	2.865696
74	2.869232	2.869818	2.870404	2.870989	2.871573
75	2.875061	2.875640	2.876218	2.876795	2.877371
76	2.880814	2.881385	2.881955	2.882525	2.883093
77	2.886491	2.887054	2.887617	2.888179	2.888741
78	2.892095	2.892651	2.893207	2.893762	2.894316
79	2.897627	2.898176	2.898725	2.899273	2.899821

Common Logarithms.

5

5.00	6.00	7.00	8.00	9.00	D.
2.607455	2.608526	2.609594	2.610660	2.611723	1071
2.618048	2.619093	2.620136	2.621176	2.622214	1045
2.628389	2.629410	2.630428	2.631444	2.632457	1021
2.638483	2.639486	2.640481	2.641474	2.642464	997
2.648360	2.649335	2.650308	2.651278	2.652246	975
2.658011	2.658965	2.659916	2.660865	2.661813	953
2.667453	2.668386	2.669317	2.670246	2.671173	933
2.676694	2.677607	2.678518	2.679428	2.680336	913
2.685742	2.686636	2.687529	2.688420	2.689309	895
2.694605	2.695482	2.696356	2.697229	2.698101	875
2.703291	2.704151	2.705008	2.705864	2.706718	859
2.711807	2.712650	2.713491	2.714330	2.715167	842
2.720159	2.720986	2.721811	2.722634	2.723456	826
2.728354	2.729165	2.729974	2.730782	2.731589	811
2.736397	2.737193	2.737987	2.738781	2.739572	796
2.744293	2.745075	2.745855	2.746634	2.747412	782
2.752048	2.752816	2.753583	2.754348	2.755112	768
2.759668	2.760422	2.761176	2.761928	2.762679	755
2.767156	2.767898	2.768638	2.769377	2.770115	742
2.774517	2.775246	2.775974	2.776701	2.777427	729
2.781755	2.782473	2.783189	2.783904	2.784617	717
2.788875	2.789581	2.790285	2.790988	2.791691	706
2.795880	2.796574	2.797268	2.797960	2.798651	694
2.802774	2.803457	2.804139	2.804821	2.805501	683
2.809560	2.810233	2.810904	2.811575	2.812245	673
2.816241	2.816904	2.817565	2.818226	2.818885	663
2.822822	2.823474	2.824126	2.824776	2.825426	653
2.829304	2.829947	2.830589	2.831230	2.831870	643
2.835691	2.836324	2.836957	2.837588	2.838219	634
2.841985	2.842609	2.843233	2.843855	2.844477	624
2.848189	2.848805	2.849419	2.850033	2.850646	616
2.854306	2.854913	2.855519	2.856124	2.856729	607
2.860338	2.860937	2.861534	2.862131	2.862728	599
2.866287	2.866878	2.867467	2.868056	2.868644	590
2.872156	2.872739	2.873321	2.873902	2.874482	583
2.877947	2.878522	2.879096	2.879669	2.880242	575
2.883661	2.884229	2.884795	2.885361	2.885926	567
2.889302	2.889862	2.890421	2.890980	2.891537	560
2.894870	2.895423	2.895975	2.896526	2.897077	553
2.900367	2.900913	2.901458	2.902003	2.902547	546

N.	0.00	1.00	2.00	3.00	4.00
80	2.903090	2.903633	2.904174	2.904716	2.905256
81	2.908485	2.909021	2.909556	2.910091	2.910624
82	2.913814	2.914343	2.914872	2.915400	2.915927
83	2.919078	2.919601	2.920123	2.920645	2.921166
84	2.924279	2.924796	2.925312	2.925828	2.926342
85	2.929419	2.929930	2.930440	2.930949	2.931458
86	2.934498	2.935003	2.935507	2.936011	2.936514
87	2.939519	2.940018	2.940516	2.941014	2.941511
88	2.944483	2.944976	2.945469	2.945961	2.946452
89	2.949390	2.949878	2.950365	2.950851	2.951338
90	2.954243	2.954725	2.955207	2.955688	2.956168
91	2.959041	2.959518	2.959995	2.960471	2.960946
92	2.963788	2.964260	2.964731	2.965202	2.965672
93	2.968483	2.968950	2.969416	2.969882	2.970347
94	2.973128	2.973590	2.974051	2.974512	2.974972
95	2.977724	2.978181	2.978637	2.979093	2.979548
96	2.982271	2.982723	2.983175	2.983626	2.984077
97	2.986772	2.987219	2.987666	2.988113	2.988559
98	2.991226	2.991669	2.992111	2.992554	2.992995
99	2.995635	2.996074	2.996512	2.996949	2.997386
100	3.000000	3.000434	3.000868	3.001301	3.001734
101	3.004321	3.004751	3.005181	3.005609	3.006038
102	3.008600	3.009026	3.009451	3.009876	3.010300
103	3.012837	3.013259	3.013680	3.014100	3.014521
104	3.017033	3.017451	3.017868	3.018284	3.018700
105	3.021189	3.021603	3.022016	3.022428	3.022841
106	3.025306	3.025715	3.026125	3.026533	3.026942
107	3.029384	3.029789	3.030195	3.030600	3.031004
108	3.033424	3.033826	3.034227	3.034628	3.035029
109	3.037426	3.037825	3.038223	3.038620	3.039017
110	3.041393	3.041787	3.042182	3.042576	3.042969
111	3.045323	3.045714	3.046105	3.046495	3.046885
112	3.049218	3.049606	3.049993	3.050380	3.050766
113	3.053078	3.053463	3.053846	3.054230	3.054613
114	3.056905	3.057286	3.057666	3.058046	3.058426
115	3.060698	3.061075	3.061452	3.061829	3.062206
116	3.064458	3.064832	3.065206	3.065580	3.065953
117	3.068186	3.068557	3.068928	3.069298	3.069668
118	3.071882	3.072250	3.072617	3.072985	3.073352
119	3.075547	3.075912	3.076276	3.076640	3.077004

Common Logarithms.

7

5.00	6.00	7.00	8.00	9.00	D.
2.905796	2.906335	2.906874	2.907411	2.907949	539
2.911158	2.911699	2.912242	2.912753	2.913284	533
2.916454	2.916980	2.917586	2.918030	2.918555	526
2.921686	2.922206	2.922725	2.923244	2.923762	520
2.926857	2.927370	2.927883	2.928396	2.928908	514
2.931966	2.932474	2.932981	2.933487	2.933993	508
2.937016	2.937518	2.938019	2.938520	2.939020	502
2.942008	2.942504	2.943000	2.943495	2.943989	496
2.946943	2.947434	2.947924	2.948413	2.948902	490
2.951823	2.952308	2.952792	2.953276	2.953760	484
2.956649	2.957128	2.957607	2.958086	2.958564	480
2.961421	2.961895	2.962369	2.962843	2.963316	474
2.966142	2.966611	2.967080	2.967548	2.968016	469
2.970812	2.971276	2.971740	2.972203	2.972666	464
2.975432	2.975891	2.976350	2.976808	2.977266	459
2.980003	2.980458	2.980912	2.981366	2.981819	455
2.984527	2.984977	2.985426	2.985875	2.986324	450
2.989005	2.989450	2.989895	2.990339	2.990783	445
2.993436	2.993877	2.994317	2.994757	2.995196	441
2.997823	2.998259	2.998695	2.999131	2.999565	436
3.002166	3.002598	3.003029	3.003461	3.003891	432
3.006466	3.006894	3.007321	3.007748	3.008174	428
3.010724	3.011147	3.011570	3.011993	3.012415	424
3.014940	3.015360	3.015779	3.016197	3.016616	419
3.019116	3.019532	3.019947	3.020361	3.020775	416
3.023252	3.023664	3.024075	3.024486	3.024896	412
3.027350	3.027757	3.028164	3.028571	3.028978	408
3.031408	3.031812	3.032216	3.032619	3.033021	404
3.035430	3.035830	3.036230	3.036629	3.037028	400
3.039414	3.039811	3.040207	3.040602	3.040998	396
3.043362	3.043755	3.044148	3.044540	3.044932	393
3.047275	3.047664	3.048053	3.048442	3.048830	389
3.051153	3.051538	3.051924	3.052309	3.052694	386
3.054996	3.055378	3.055760	3.056142	3.056524	382
3.058805	3.059185	3.059563	3.059942	3.060320	379
3.062582	3.062958	3.063333	3.063709	3.064083	376
3.066326	3.066699	3.067071	3.067443	3.067815	372
3.070038	3.070407	3.070776	3.071145	3.071514	369
3.073718	3.074085	3.074451	3.074816	3.075182	366
3.077368	3.077731	3.078094	3.078457	3.078819	363

N.	0.00	1.00	2.00	3.00	4.00
120	3.079181	3.079543	3.079904	3.080266	3.080626
121	3.082785	3.083144	3.083503	3.083861	3.084219
122	3.086359	3.086716	3.087071	3.087426	3.087781
123	3.089905	3.090258	3.090611	3.090963	3.091315
124	3.093422	3.093772	3.094122	3.094471	3.094820
125	3.096910	3.097257	3.097604	3.097951	3.098298
126	3.100371	3.100715	3.101059	3.101403	3.101747
127	3.103804	3.104146	3.104487	3.104828	3.105169
128	3.107210	3.107549	3.107888	3.108227	3.108565
129	3.110590	3.110926	3.111263	3.111599	3.111934
130	3.113943	3.114277	3.114611	3.114944	3.115278
131	3.117271	3.117603	3.117934	3.118265	3.118595
132	3.120574	3.120903	3.121231	3.121559	3.121888
133	3.123852	3.124178	3.124504	3.124830	3.125156
134	3.127105	3.127429	3.127753	3.128076	3.128399
135	3.130334	3.130655	3.130977	3.131298	3.131619
136	3.133539	3.133858	3.134177	3.134496	3.134814
137	3.136721	3.137037	3.137354	3.137671	3.137987
138	3.139879	3.140194	3.140508	3.140822	3.141136
139	3.143015	3.143327	3.143639	3.143951	3.144263
140	3.146128	3.146438	3.146748	3.147058	3.147367
141	3.149219	3.149527	3.149835	3.150142	3.150449
142	3.152288	3.152594	3.152900	3.153205	3.153510
143	3.155336	3.155640	3.155943	3.156246	3.156549
144	3.158362	3.158664	3.158965	3.159266	3.159567
145	3.161368	3.161667	3.161967	3.162266	3.162564
146	3.164353	3.164650	3.164947	3.165244	3.165541
147	3.167317	3.167613	3.167908	3.168203	3.168497
148	3.170262	3.170555	3.170848	3.171141	3.171434
149	3.173186	3.173478	3.173769	3.174060	3.174351
150	3.176091	3.176381	3.176670	3.176959	3.177248
151	3.178977	3.179264	3.179552	3.179839	3.180126
152	3.181844	3.182129	3.182415	3.182700	3.182985
153	3.184691	3.184975	3.185259	3.185542	3.185825
154	3.187521	3.187803	3.188084	3.188366	3.188647
155	3.190332	3.190612	3.190892	3.191171	3.191451
156	3.193125	3.193403	3.193681	3.193959	3.194237
157	3.195900	3.196176	3.196453	3.196729	3.197005
158	3.198657	3.198932	3.199206	3.199481	3.199755
159	3.201397	3.201670	3.201943	3.202216	3.202488

Common Logarithms.

9

5.00	6.00	7.00	8.00	9.00	D ₁
3.080987	3.081347	3.081707	3.082067	3.082426	360
3.084576	3.084934	3.085291	3.085647	3.086004	357
3.088136	3.088490	3.088845	3.089198	3.089551	355
3.091667	3.092018	3.092370	3.092721	3.093071	351
3.095169	3.095518	3.095866	3.096215	3.096562	349
3.098644	3.098990	3.099335	3.099681	3.100026	346
3.102091	3.102434	3.102777	3.103119	3.103462	343
3.105510	3.105851	3.106191	3.106531	3.106871	340
3.108903	3.109241	3.109579	3.109916	3.110253	338
3.112270	3.112605	3.112940	3.113275	3.113609	335
3.115611	3.115943	3.116276	3.116608	3.116940	333
3.118926	3.119256	3.119586	3.119915	3.120245	330
3.122216	3.122544	3.122871	3.123198	3.123525	328
3.125481	3.125806	3.126131	3.126456	3.126781	325
3.128722	3.129045	3.129368	3.129690	3.130012	323
3.131939	3.132260	3.132580	3.132900	3.133219	321
3.135133	3.135451	3.135769	3.136086	3.136403	318
3.138303	3.138618	3.138934	3.139249	3.139564	315
3.141450	3.141763	3.142076	3.142389	3.142702	314
3.144574	3.144885	3.145196	3.145507	3.145818	311
3.147676	3.147985	3.148294	3.148603	3.148911	309
3.150756	3.151063	3.151370	3.151676	3.151982	307
3.153815	3.154120	3.154424	3.154728	3.155032	305
3.156852	3.157154	3.157457	3.157759	3.158061	303
3.159868	3.160168	3.160469	3.160769	3.161068	301
3.162863	3.163161	3.163460	3.163758	3.164055	299
3.165838	3.166134	3.166430	3.166726	3.167022	297
3.168792	3.169086	3.169380	3.169674	3.169968	295
3.171726	3.172019	3.172311	3.172603	3.172895	293
3.174641	3.174932	3.175222	3.175512	3.175802	291
3.177536	3.177825	3.178114	3.178401	3.178689	289
3.180413	3.180699	3.180986	3.181272	3.181558	287
3.183270	3.183555	3.183839	3.184123	3.184407	285
3.186108	3.186391	3.186674	3.186956	3.187239	283
3.188928	3.189209	3.189490	3.189771	3.190051	281
3.191730	3.192010	3.192290	3.192567	3.192846	279
3.194514	3.194792	3.195069	3.195346	3.195623	278
3.197281	3.197556	3.197832	3.198107	3.198382	276
3.200029	3.200303	3.200577	3.200850	3.201124	274
3.202761	3.203033	3.203305	3.203577	3.203848	272

N.	0.00	1.00	2.00	3.00	4.00
160	3.204120	3.204391	3.204662	3.204934	3.205204
161	3.206826	3.207096	3.207365	3.207634	3.207904
162	3.209518	3.209788	3.210057	3.210326	3.210595
163	3.212210	3.212479	3.212748	3.213017	3.213286
164	3.214901	3.215170	3.215439	3.215708	3.215977
165	3.217581	3.217850	3.218119	3.218388	3.218657
166	3.220271	3.220540	3.220809	3.221078	3.221347
167	3.222961	3.223230	3.223499	3.223768	3.224037
168	3.225721	3.225990	3.226259	3.226528	3.226797
169	3.228481	3.228750	3.229019	3.229288	3.229557
170	3.231241	3.231510	3.231779	3.232048	3.232317
171	3.234071	3.234340	3.234609	3.234878	3.235147
172	3.236831	3.237100	3.237369	3.237638	3.237907
173	3.239691	3.239960	3.240229	3.240498	3.240767
174	3.242521	3.242790	3.243059	3.243328	3.243597
175	3.245381	3.245650	3.245919	3.246188	3.246457
176	3.248241	3.248510	3.248779	3.249048	3.249317
177	3.250101	3.250370	3.250639	3.250908	3.251177
178	3.252961	3.253230	3.253499	3.253768	3.254037
179	3.255791	3.256060	3.256329	3.256598	3.256867
180	3.258651	3.258920	3.259189	3.259458	3.259727
181	3.261511	3.261780	3.262049	3.262318	3.262587
182	3.264371	3.264640	3.264909	3.265178	3.265447
183	3.267231	3.267500	3.267769	3.268038	3.268307
184	3.270091	3.270360	3.270629	3.270898	3.271167
185	3.272961	3.273230	3.273499	3.273768	3.274037
186	3.275831	3.276100	3.276369	3.276638	3.276907
187	3.278691	3.278960	3.279229	3.279498	3.279767
188	3.281551	3.281820	3.282089	3.282358	3.282627
189	3.284411	3.284680	3.284949	3.285218	3.285487
190	3.287341	3.287610	3.287879	3.288148	3.288417
191	3.290241	3.290510	3.290779	3.291048	3.291317
192	3.293101	3.293370	3.293639	3.293908	3.294177
193	3.295961	3.296230	3.296499	3.296768	3.297037
194	3.298821	3.299090	3.299359	3.299628	3.299897
195	3.301681	3.301950	3.302219	3.302488	3.302757
196	3.304541	3.304810	3.305079	3.305348	3.305617
197	3.307401	3.307670	3.307939	3.308208	3.308477
198	3.310261	3.310530	3.310799	3.311068	3.311337
199	3.313121	3.313390	3.313659	3.313928	3.314197

Common Logarithms.

11

6.00	6.00	7.00	8.00	9.00	D.
3.205475	3.205746	3.206016	3.206286	3.206556	271
3.208173	3.208441	3.208710	3.208979	3.209247	269
3.210853	3.211121	3.211388	3.211654	3.211921	267
3.213518	3.213783	3.214049	3.214314	3.214579	266
3.216166	3.216430	3.216694	3.216957	3.217221	264
3.218798	3.219060	3.219323	3.219585	3.219846	262
3.221414	3.221675	3.221936	3.222196	3.222456	261
3.224015	3.224274	3.224533	3.224792	3.225051	259
3.226600	3.226858	3.227115	3.227372	3.227630	258
3.229170	3.229426	3.229682	3.229938	3.230193	256
3.231724	3.231979	3.232234	3.232488	3.232742	254
3.234264	3.234517	3.234770	3.235023	3.235276	253
3.236789	3.237041	3.237292	3.237544	3.237795	252
3.239299	3.239550	3.239800	3.240050	3.240300	250
3.241795	3.242044	3.242293	3.242541	3.242790	249
3.244277	3.244525	3.244772	3.245019	3.245266	248
3.246745	3.246991	3.247237	3.247482	3.247728	246
3.249198	3.249443	3.249687	3.249932	3.250176	245
3.251638	3.251881	3.252125	3.252368	3.252610	243
3.254064	3.254306	3.254548	3.254790	3.255031	242
3.256477	3.256718	3.256958	3.257198	3.257439	241
3.258877	3.259116	3.259355	3.259594	3.259833	239
3.261263	3.261501	3.261739	3.261976	3.262214	238
3.263630	3.263873	3.264109	3.264346	3.264582	237
3.265996	3.266232	3.266467	3.266702	3.266937	235
3.268344	3.268578	3.268812	3.269046	3.269279	234
3.270679	3.270912	3.271144	3.271377	3.271609	233
3.273001	3.273233	3.273464	3.273696	3.273927	232
3.275311	3.275542	3.275772	3.276002	3.276232	230
3.277609	3.277838	3.278067	3.278296	3.278525	229
3.279895	3.280123	3.280351	3.280578	3.280806	228
3.282169	3.282396	3.282622	3.282849	3.283075	227
3.284431	3.284656	3.284882	3.285107	3.285332	226
3.286681	3.286905	3.287130	3.287354	3.287578	225
3.288920	3.289143	3.289366	3.289589	3.289812	223
3.291147	3.291369	3.291591	3.291813	3.292014	222
3.293363	3.293584	3.293804	3.294025	3.294246	221
3.295567	3.295787	3.296007	3.296226	3.296446	220
3.297761	3.297979	3.298198	3.298416	3.298635	219
3.299941	3.300161	3.300378	3.300595	3.300813	218

N.	0.00	1.00	2.00	3.00	4.00
200	3.301030	3.301247	3.301464	3.301681	3.301898
201	3.303196	3.303412	3.303628	3.303844	3.304059
202	3.305351	3.305566	3.305781	3.305996	3.306211
203	3.307496	3.307710	3.307924	3.308137	3.308351
204	3.309630	3.309843	3.310056	3.310268	3.310481
205	3.311754	3.311966	3.312177	3.312389	3.312600
206	3.313867	3.314078	3.314289	3.314499	3.314710
207	3.315970	3.316180	3.316390	3.316599	3.316809
208	3.318063	3.318272	3.318481	3.318689	3.318898
209	3.320146	3.320354	3.320562	3.320769	3.320977
210	3.322219	3.322426	3.322633	3.322839	3.323046
211	3.324282	3.324488	3.324694	3.324899	3.325105
212	3.326336	3.326541	3.326745	3.326950	3.327155
213	3.328380	3.328583	3.328787	3.328991	3.329194
214	3.330414	3.330617	3.330819	3.331022	3.331225
215	3.332438	3.332640	3.332842	3.333044	3.333246
216	3.334454	3.334655	3.334856	3.335057	3.335257
217	3.336460	3.336660	3.336860	3.337060	3.337260
218	3.338456	3.338656	3.338855	3.339054	3.339252
219	3.340444	3.340642	3.340841	3.341039	3.341237
220	3.342423	3.342620	3.342817	3.343014	3.343212
221	3.344392	3.344589	3.344785	3.344981	3.345178
222	3.346353	3.346549	3.346744	3.346939	3.347135
223	3.348305	3.348500	3.348694	3.348889	3.349083
224	3.350248	3.350442	3.350636	3.350829	3.351023
225	3.352183	3.352375	3.352568	3.352761	3.352954
226	3.354108	3.354301	3.354493	3.354685	3.354876
227	3.356026	3.356217	3.356408	3.356599	3.356790
228	3.357935	3.358125	3.358316	3.358506	3.358696
229	3.359835	3.360025	3.360215	3.360404	3.360593
230	3.361728	3.361917	3.362105	3.362294	3.362482
231	3.363612	3.363800	3.363988	3.364176	3.364363
232	3.365488	3.365675	3.365862	3.366049	3.366236
233	3.367356	3.367542	3.367729	3.367915	3.368101
234	3.369216	3.369401	3.369587	3.369772	3.369958
235	3.371068	3.371253	3.371437	3.371622	3.371806
236	3.372912	3.373096	3.373280	3.373464	3.373647
237	3.374748	3.374932	3.375115	3.375298	3.375481
238	3.376577	3.376759	3.376942	3.377124	3.377306
239	3.378398	3.378580	3.378761	3.378943	3.379124

Common Logarithms.

13

5.00	6.00	7.00	8.00	9.00	D.
3.302114	3.302331	3.302547	3.302764	3.302980	217
3.304275	3.304491	3.304706	3.304921	3.305136	216
3.306425	3.306639	3.306854	3.307068	3.307282	215
3.308564	3.308778	3.308991	3.309204	3.309417	213
3.310693	3.310906	3.311118	3.311330	3.311542	212
3.312812	3.313023	3.313234	3.313445	3.313656	211
3.314920	3.315130	3.315340	3.315551	3.315760	210
3.317018	3.317227	3.317436	3.317646	3.317854	209
3.319106	3.319314	3.319522	3.319730	3.319938	208
3.321184	3.321391	3.321598	3.321805	3.322012	207
3.323252	3.323458	3.323665	3.323871	3.324077	206
3.325310	3.325516	3.325721	3.325926	3.326131	205
3.327363	3.327563	3.327767	3.327972	3.328176	204
3.329398	3.329601	3.329805	3.330008	3.330211	203
3.331430	3.331630	3.331832	3.332034	3.332236	202
3.333447	3.333649	3.333850	3.334051	3.334253	201
3.335458	3.335658	3.335859	3.336059	3.336260	201
3.337459	3.337659	3.337858	3.338058	3.338257	200
3.339451	3.339650	3.339849	3.340047	3.340246	199
3.341435	3.341632	3.341830	3.342028	3.342225	198
3.343409	3.343606	3.343802	3.343999	3.344196	197
3.345374	3.345570	3.345766	3.345962	3.346157	196
3.347330	3.347525	3.347720	3.347915	3.348110	195
3.349278	3.349472	3.349666	3.349860	3.350054	194
3.351216	3.351410	3.351610	3.351796	3.351989	193
3.353147	3.353339	3.353532	3.353724	3.353916	193
3.355068	3.355260	3.355452	3.355643	3.355834	192
3.356981	3.357172	3.357363	3.357554	3.357744	191
3.358886	3.359076	3.359266	3.359456	3.359646	190
3.360783	3.360972	3.361161	3.361350	3.361539	189
3.362671	3.362859	3.363048	3.363236	3.363424	188
3.364551	3.364739	3.364926	3.365113	3.365301	188
3.366423	3.366610	3.366796	3.366983	3.367169	187
3.368287	3.368473	3.368659	3.368845	3.369030	186
3.370143	3.370328	3.370513	3.370698	3.370883	185
3.371991	3.372175	3.372360	3.372544	3.372728	184
3.373831	3.374015	3.374198	3.374382	3.374565	184
3.375664	3.375846	3.376029	3.376212	3.376394	183
3.377488	3.377670	3.377852	3.378034	3.378216	182
3.379306	3.379487	3.379668	3.379849	3.380030	181

N.	0.00	1.00	2.00	3.00	4.00
240	3.380211	3.380392	3.380573	3.380754	3.380934
241	3.382017	3.382197	3.382377	3.382557	3.382737
242	3.383815	3.383995	3.384174	3.384353	3.384533
243	3.385606	3.385785	3.385964	3.386142	3.386321
244	3.387390	3.387568	3.387746	3.387923	3.388101
245	3.389166	3.389343	3.389520	3.389698	3.389875
246	3.390935	3.391112	3.391288	3.391464	3.391641
247	3.392697	3.392873	3.393048	3.393224	3.393400
248	3.394452	3.394627	3.394802	3.394977	3.395152
249	3.396199	3.396374	3.396548	3.396722	3.396896
250	3.397940	3.398114	3.398287	3.398461	3.398634
251	3.399674	3.399847	3.400020	3.400192	3.400365
252	3.401401	3.401573	3.401745	3.401917	3.402089
253	3.403121	3.403292	3.403464	3.403635	3.403807
254	3.404834	3.405005	3.405176	3.405346	3.405517
255	3.406540	3.406710	3.406881	3.407051	3.407221
256	3.408240	3.408410	3.408579	3.408749	3.408918
257	3.409933	3.410102	3.410271	3.410440	3.410609
258	3.411620	3.411788	3.411956	3.412124	3.412293
259	3.413100	3.413267	3.413435	3.413603	3.413770
260	3.414973	3.415140	3.415307	3.415474	3.415641
261	3.416641	3.416807	3.416973	3.417139	3.417306
262	3.418301	3.418467	3.418633	3.418798	3.418964
263	3.419956	3.420121	3.420286	3.420451	3.420616
264	3.421604	3.421768	3.421933	3.422097	3.422261
265	3.423246	3.423410	3.423574	3.423737	3.423901
266	3.424882	3.425045	3.425208	3.425371	3.425534
267	3.426511	3.426674	3.426836	3.426999	3.427161
268	3.428135	3.428297	3.428459	3.428621	3.428783
269	3.429752	3.429914	3.430075	3.430236	3.430398
270	3.431304	3.431465	3.431625	3.431786	3.431947
271	3.432969	3.433130	3.433290	3.433450	3.433610
272	3.434569	3.434729	3.434888	3.435048	3.435207
273	3.436163	3.436322	3.436481	3.436640	3.436799
274	3.437751	3.437909	3.438067	3.438226	3.438384
275	3.439333	3.439491	3.439648	3.439806	3.439964
276	3.440909	3.441066	3.441224	3.441381	3.441538
277	3.442480	3.442637	3.442793	3.442950	3.443106
278	3.444045	3.444201	3.444357	3.444513	3.444669
279	3.445604	3.445760	3.445915	3.446071	3.446226

Common Logarithms.

15

5.00	6.00	7.00	8.00	9.00	D.
3.381115	3.381296	3.381476	3.381656	3.381837	181
3.382917	3.383097	3.383277	3.383456	3.383636	180
3.384712	3.384891	3.385070	3.385249	3.385428	179
3.386499	3.386677	3.386856	3.386034	3.387212	178
3.388279	3.388456	3.388634	3.388811	3.388989	178
3.390051	3.390228	3.390405	3.390582	3.390759	177
3.391817	3.391993	3.392169	3.392345	3.392521	176
3.393575	3.393751	3.393926	3.394101	3.394277	176
3.395326	3.395501	3.395676	3.395850	3.396025	175
3.397071	3.397245	3.397419	3.397592	3.397766	174
3.398808	3.398981	3.399154	3.399328	3.399501	173
3.400538	3.400711	3.400882	3.401056	3.401228	173
3.402261	3.402433	3.402605	3.402777	3.402949	172
3.403978	3.404149	3.404320	3.404492	3.404663	171
3.405688	3.405858	3.406029	3.406199	3.406370	171
3.407391	3.407561	3.407731	3.407901	3.408070	170
3.409087	3.409257	3.409426	3.409595	3.409764	169
3.410777	3.410946	3.411114	3.411283	3.411451	169
3.412461	3.412629	3.412796	3.412964	3.413132	168
3.414137	3.414305	3.414472	3.414639	3.414806	167
3.415808	3.415974	3.416141	3.416308	3.416474	167
3.417472	3.417638	3.417804	3.417970	3.418135	166
3.419129	3.419295	3.419460	3.419625	3.419791	165
3.420781	3.420945	3.421110	3.421275	3.421439	165
3.422426	3.422590	3.422754	3.422918	3.423082	164
3.424065	3.424228	3.424392	3.424555	3.424718	164
3.425697	3.425860	3.426023	3.426186	3.426349	163
3.427324	3.427486	3.427648	3.427811	3.427973	162
3.428944	3.429106	3.429268	3.429429	3.429591	162
3.430559	3.430720	3.430881	3.431042	3.431203	161
3.432167	3.432328	3.432488	3.432649	3.432809	161
3.433769	3.433930	3.434090	3.434249	3.434409	160
3.435367	3.435526	3.435685	3.435844	3.436004	159
3.436957	3.437116	3.437275	3.437433	3.437592	159
3.438542	3.438701	3.438859	3.439017	3.439175	158
3.440122	3.440279	3.440437	3.440594	3.440752	158
3.441695	3.441852	3.442009	3.442166	3.442323	157
3.443263	3.443419	3.443576	3.443732	3.443889	157
3.444825	3.444981	3.445137	3.445293	3.445449	156
3.446382	3.446537	3.446692	3.446848	3.447003	155

N.	0.00	1.00	2.00	3.00	4.00
280	3.447158	3.447313	3.447468	3.447623	3.447778
281	3.448706	3.448861	3.449015	3.449170	3.449324
282	3.450249	3.450403	3.450557	3.450711	3.450865
283	3.451786	3.451940	3.452093	3.452247	3.452400
284	3.453318	3.453471	3.453624	3.453777	3.453930
285	3.454845	3.454997	3.455150	3.455302	3.455454
286	3.456366	3.456518	3.456670	3.456821	3.456973
287	3.457882	3.458033	3.458184	3.458336	3.458487
288	3.459392	3.459543	3.459694	3.459845	3.459995
289	3.460898	3.461048	3.461198	3.461348	3.461499
290	3.462398	3.462548	3.462697	3.462847	3.462997
291	3.463893	3.464042	3.464191	3.464340	3.464490
292	3.465383	3.465532	3.465680	3.465829	3.465986
293	3.466868	3.467016	3.467164	3.467312	3.467460
294	3.468347	3.468495	3.468643	3.468790	3.468938
295	3.469822	3.469969	3.470116	3.470263	3.470410
296	3.471292	3.471438	3.471585	3.471732	3.471878
297	3.472756	3.472903	3.473049	3.473195	3.473341
298	3.474216	3.474362	3.474508	3.474653	3.474799
299	3.475671	3.475816	3.475962	3.476107	3.476252
300	3.477121	3.477266	3.477411	3.477555	3.477700
301	3.478566	3.478711	3.478855	3.478999	3.479143
302	3.480007	3.480151	3.480294	3.480438	3.480582
303	3.481443	3.481586	3.481729	3.481872	3.482016
304	3.482875	3.483016	3.483159	3.483302	3.483445
305	3.484300	3.484442	3.484585	3.484727	3.484869
306	3.485721	3.485863	3.486005	3.486147	3.486289
307	3.487138	3.487280	3.487421	3.487563	3.487704
308	3.488551	3.488692	3.488833	3.488974	3.489114
309	3.489958	3.490099	3.490239	3.490380	3.490520
310	3.491362	3.491502	3.491642	3.491782	3.491922
311	3.492760	3.492900	3.493040	3.493179	3.493319
312	3.494155	3.494294	3.494433	3.494572	3.494711
313	3.495544	3.495683	3.495822	3.495960	3.496099
314	3.496930	3.497068	3.497206	3.497344	3.497483
315	3.498311	3.498448	3.498586	3.498724	3.498862
316	3.499687	3.499824	3.499962	3.500099	3.500236
317	3.501059	3.501196	3.501333	3.501470	3.501607
318	3.502427	3.502564	3.502700	3.502837	3.502973
319	3.503791	3.503927	3.504063	3.504199	3.504335

Common Logarithms.

17

5.00	6.00	7.00	8.00	9.00	D.
3.447933	3.448088	3.448242	3.448397	3.448552	155
3.449478	3.449633	3.449787	3.449941	3.450095	154
3.451018	3.451172	3.451326	3.451479	3.451633	154
3.452553	3.452706	3.452859	3.453012	3.453165	153
3.454082	3.454235	3.454387	3.454540	3.454692	153
3.455606	3.455758	3.455910	3.456062	3.456214	152
3.457125	3.457276	3.457428	3.457579	3.457731	152
3.458638	3.458789	3.458940	3.459091	3.459242	151
3.460146	3.460296	3.460447	3.460597	3.460748	151
3.461649	3.461799	3.461948	3.462098	3.462248	150
3.463146	3.463296	3.463445	3.463594	3.463744	150
3.464639	3.464788	3.464936	3.465085	3.465234	149
3.466126	3.466274	3.466423	3.466571	3.466719	149
3.467608	3.467756	3.467904	3.468052	3.468200	148
3.469085	3.469233	3.469380	3.469527	3.469675	147
3.470557	3.470704	3.470851	3.470998	3.471145	147
3.472025	3.472171	3.472318	3.472464	3.472610	146
3.473487	3.473633	3.473779	3.473925	3.474071	146
3.474944	3.475090	3.475235	3.475381	3.475526	145
3.476397	3.476542	3.476687	3.476832	3.476976	145
3.477844	3.477989	3.478133	3.478278	3.478422	145
3.479287	3.479431	3.479575	3.479719	3.479863	144
3.480725	3.480869	3.481012	3.481156	3.481299	144
3.482159	3.482302	3.482445	3.482588	3.482731	143
3.483587	3.483730	3.483872	3.484015	3.484157	143
3.485011	3.485153	3.485295	3.485437	3.485579	142
3.486430	3.486572	3.486714	3.486855	3.486997	142
3.487845	3.487986	3.488127	3.488269	3.488410	141
3.489255	3.489396	3.489537	3.489677	3.489818	141
3.490661	3.490801	3.490941	3.491081	3.491222	140
3.492062	3.492201	3.492341	3.492481	3.492621	140
3.493458	3.493597	3.493737	3.493876	3.494015	139
3.494850	3.494989	3.495128	3.495267	3.495406	139
3.495238	3.495376	3.495515	3.495653	3.495791	138
3.497623	3.497759	3.497897	3.498035	3.498173	138
3.498999	3.499137	3.499275	3.499412	3.499550	138
3.500374	3.500511	3.500648	3.500785	3.500922	137
3.501744	3.501880	3.502017	3.502154	3.502291	137
3.503109	3.503246	3.503382	3.503518	3.503654	136
3.504471	3.504607	3.504743	3.504878	3.505014	136

N.	0.00	1.00	2.00	3.00	4.00
320	3.505150	3.505286	3.505421	3.505557	3.505693
321	3.506505	3.506640	3.506776	3.506911	3.507046
322	3.507856	3.507991	3.508126	3.508260	3.508395
323	3.509203	3.509337	3.509471	3.509606	3.509740
324	3.510545	3.510679	3.510813	3.510947	3.511081
325	3.511883	3.512017	3.512151	3.512284	3.502418
326	3.513218	3.513351	3.513484	3.513617	3.513750
327	3.514548	3.514681	3.514813	3.514946	3.515079
328	3.515874	3.516006	3.516139	3.516271	3.516403
329	3.517196	3.517328	3.517460	3.517592	3.517724
330	3.518514	3.518646	3.518777	3.518909	3.519040
331	3.519828	3.519959	3.520090	3.520221	3.520353
332	3.521138	3.521269	3.521400	3.521530	3.521661
333	3.522444	3.522575	3.522705	3.522835	3.522966
334	3.523746	3.523876	3.524006	3.524136	3.524266
335	3.525045	3.525174	3.525304	3.525434	3.525563
336	3.526339	3.526469	3.526598	3.526727	3.526856
337	3.527630	3.527759	3.527888	3.528016	3.528145
338	3.528917	3.529045	3.529174	3.529302	3.529430
339	3.530200	3.530328	3.530456	3.530584	3.530712
340	3.531479	3.531607	3.531734	3.531862	3.531990
341	3.532754	3.532882	3.533009	3.533136	3.533264
342	3.534026	3.534153	3.534280	3.534407	3.534534
343	3.535294	3.535421	3.535547	3.535674	3.535800
344	3.536558	3.536685	3.536811	3.536937	3.537063
345	3.537819	3.537945	3.538071	3.538197	3.538322
346	3.539076	3.539202	3.539327	3.539452	3.539578
347	3.540329	3.540455	3.540580	3.540705	3.540830
348	3.541579	3.541704	3.541829	3.541953	3.542078
349	3.542825	3.542950	3.543074	3.543199	3.543323
350	3.544068	3.544192	3.544316	3.544440	3.544564
351	3.545307	3.545431	3.545555	3.545678	3.545802
352	3.546543	3.546666	3.546789	3.546913	3.547036
353	3.547775	3.547898	3.548021	3.548144	3.548267
354	3.549003	3.549126	3.549249	3.549371	3.549494
355	3.550228	3.550351	3.550473	3.550595	3.550717
356	3.551450	3.551572	3.551694	3.551816	3.551938
357	3.552668	3.552790	3.552911	3.553033	3.553155
358	3.553883	3.554004	3.554126	3.554247	3.554368
359	3.555094	3.555215	3.555336	3.555457	3.555578

Common Logarithms:

19

5.00	6.00	7.00	8.00	9.00	D.
3.505828	3.505964	3.506099	3.506234	3.506370	136
3.507181	3.507316	3.507451	3.507586	3.507721	135
3.508530	3.508664	3.508799	3.508934	3.509068	135
3.509874	3.510009	3.510143	3.510277	3.510411	134
3.511215	3.511349	3.511482	3.511616	3.511750	134
3.512551	3.512684	3.512818	3.512951	3.513084	133
3.513883	3.514016	3.514149	3.514282	3.514415	133
3.515211	3.515344	3.515476	3.515609	3.515741	133
3.516535	3.516668	3.516800	3.516932	3.517064	132
3.517855	3.517987	3.518119	3.518251	3.518382	132
3.519171	3.519303	3.519434	3.519566	3.519697	131
3.520484	3.520615	3.520745	3.520876	3.521007	131
3.521792	3.521922	3.522053	3.522183	3.522314	131
3.523096	3.523226	3.523356	3.523486	3.523616	130
3.524396	3.524526	3.524656	3.524785	3.524915	130
3.525693	3.525822	3.525951	3.526081	3.526210	129
3.526985	3.527114	3.527243	3.527372	3.527501	129
3.528274	3.528402	3.528531	3.528660	3.528788	129
3.529559	3.529687	3.529815	3.529943	3.530072	128
3.530840	3.530968	3.531096	3.531223	3.531351	128
3.532117	3.532245	3.532372	3.532500	3.532627	128
3.533391	3.533518	3.533645	3.533772	3.533899	127
3.534661	3.534787	3.534914	3.535041	3.535167	127
3.535927	3.536053	3.536180	3.536306	3.536432	126
3.537180	3.537315	3.537441	3.537567	3.537693	126
3.538448	3.538574	3.538699	3.538825	3.538951	126
3.539703	3.539829	3.539954	3.540079	3.540204	125
3.540955	3.541080	3.541205	3.541330	3.541454	125
3.542203	3.542327	3.542452	3.542576	3.542701	125
3.543447	3.543571	3.543695	3.543820	3.543944	124
3.544688	3.544812	3.544936	3.545060	3.545183	124
3.545925	3.546049	3.546172	3.546296	3.546419	124
3.547159	3.547282	3.547405	3.547529	3.547652	123
3.548389	3.548512	3.548635	3.548758	3.548881	123
3.549616	3.549739	3.549861	3.549984	3.550106	123
3.550840	3.550962	3.551084	3.551206	3.551328	122
3.552060	3.552181	3.552303	3.552425	3.552547	122
3.553276	3.553398	3.553519	3.553640	3.553762	121
3.554489	3.554610	3.554731	3.554852	3.554973	121
3.555699	3.555820	3.555940	3.556061	3.556182	121

Common Logarithms.					
N.	0.00	1.00	2.00	3.00	4.00
360	3.556303	3.556423	3.556544	3.556664	3.556785
361	3.557507	3.557627	3.557748	3.557868	3.557988
362	3.558709	3.558829	3.558948	3.559068	3.559188
363	3.559907	3.560026	3.560146	3.560265	3.560385
364	3.561191	3.561231	3.561340	3.561459	3.561578
365	3.562293	3.562412	3.562531	3.562650	3.562769
366	3.563481	3.563600	3.563718	3.563837	3.563955
367	3.564666	3.564784	3.564903	3.565021	3.565139
368	3.565848	3.565966	3.566084	3.566202	3.566320
369	3.567026	3.567144	3.567262	3.567379	3.567497
370	3.568402	3.568519	3.568636	3.568754	3.568871
371	3.569374	3.569491	3.569608	3.569725	3.569842
372	3.570543	3.570660	3.570776	3.570893	3.571010
373	3.571799	3.571825	3.571942	3.572058	3.572174
374	3.572872	3.572988	3.573104	3.573220	3.573336
375	3.574031	3.574147	3.574263	3.574379	3.574494
376	3.575188	3.575303	3.575419	3.575534	3.575649
377	3.576341	3.576457	3.576572	3.576687	3.576802
378	3.577493	3.577607	3.577722	3.577836	3.577951
379	3.578639	3.578754	3.578868	3.578983	3.579097
380	3.579784	3.579898	3.580012	3.580126	3.580241
381	3.580925	3.581039	3.581153	3.581267	3.581381
382	3.582063	3.582177	3.582291	3.582404	3.582518
383	3.583399	3.583512	3.583626	3.583739	3.583852
384	3.584831	3.584944	3.585057	3.585170	3.585283
385	3.586161	3.586274	3.586386	3.586499	3.586612
386	3.586587	3.586700	3.586812	3.586925	3.587037
387	3.587711	3.587823	3.587935	3.588047	3.588160
388	3.588832	3.588944	3.589056	3.589167	3.589279
389	3.589969	3.590081	3.590193	3.590304	3.590416
390	3.590665	3.590776	3.590887	3.591000	3.591110
391	3.592177	3.592288	3.592399	3.592510	3.592621
392	3.592886	3.592997	3.593108	3.593218	3.593329
393	3.594093	3.594203	3.594314	3.594424	3.594534
394	3.595409	3.595520	3.595631	3.595741	3.595851
395	3.596597	3.596707	3.596817	3.596927	3.597037
396	3.597595	3.597705	3.597814	3.597924	3.598034
397	3.598791	3.598900	3.599009	3.599119	3.599228
398	3.599893	3.599992	3.600101	3.600210	3.600319
399	3.600893	3.601002	3.601111	3.601220	3.601329
400	3.602222	3.602331	3.602440	3.602549	3.602658

Common Logarithms.

21

5.00	6.00	7.00	8.00	9.00	D.
3.556905	3.557026	3.557146	3.557267	3.557387	120
3.558108	3.558228	3.558349	3.558469	3.558589	120
3.559308	3.559428	3.559548	3.559667	3.559787	120
3.560504	3.560624	3.560743	3.560863	3.560982	119
3.561698	3.561817	3.561936	3.562055	3.562174	119
3.562887	3.563006	3.563125	3.563244	3.563362	119
3.564074	3.564192	3.564311	3.564429	3.564548	119
3.565257	3.565376	3.565494	3.565612	3.565730	118
3.566437	3.566555	3.566673	3.566791	3.566909	118
3.567614	3.567732	3.567849	3.567967	3.568084	118
3.568788	3.568905	3.569023	3.569140	3.569257	117
3.569959	3.570076	3.570193	3.570309	3.570426	117
3.571126	3.571243	3.571359	3.571476	3.571592	117
3.572291	3.572407	3.572523	3.572639	3.572755	116
3.573452	3.573568	3.573684	3.573800	3.573915	116
3.574610	3.574726	3.574841	3.574957	3.575072	116
3.575765	3.575880	3.575996	3.576111	3.576226	115
3.576917	3.577032	3.577147	3.577262	3.577377	115
3.578066	3.578181	3.578295	3.578410	3.578525	115
3.579212	3.579326	3.579441	3.579555	3.579669	114
3.580355	3.580469	3.580583	3.580697	3.580811	114
3.581495	3.581608	3.581722	3.581836	3.581950	114
3.582631	3.582745	3.582858	3.582972	3.583085	114
3.583765	3.583879	3.583992	3.584105	3.584218	113
3.584896	3.585009	3.585122	3.585235	3.585348	113
3.586024	3.586137	3.586250	3.586362	3.586475	113
3.587149	3.587262	3.587374	3.587486	3.587599	112
3.588272	3.588384	3.588496	3.588608	3.588720	112
3.589391	3.589503	3.589615	3.589726	3.589838	112
3.590507	3.590619	3.590730	3.590842	3.590953	112
3.591621	3.591732	3.591843	3.591955	3.592066	111
3.592732	3.592843	3.592954	3.593064	3.593175	111
3.593840	3.593950	3.594061	3.594171	3.594282	111
3.594945	3.595055	3.595165	3.595276	3.595386	110
3.596047	3.596157	3.596267	3.596377	3.596487	110
3.597146	3.597256	3.597366	3.597476	3.597586	110
3.598243	3.598353	3.598462	3.598572	3.598681	110
3.599337	3.599446	3.599556	3.599665	3.599774	109
3.600428	3.600537	3.600646	3.600755	3.600864	109
3.601517	3.601625	3.601734	3.601843	3.601951	109

N.	0.00	1.00	2.00	3.00	4.00
400	3.602060	3.602169	3.602277	3.602386	3.602494
401	3.603144	3.603253	3.603361	3.603469	3.603577
402	3.604226	3.604334	3.604442	3.604550	3.604658
403	3.605305	3.605413	3.605521	3.605628	3.605736
404	3.606381	3.606489	3.606596	3.606704	3.606811
405	3.607455	3.607562	3.607669	3.607777	3.607884
406	3.608526	3.608633	3.608740	3.608847	3.608954
407	3.609594	3.609701	3.609808	3.609914	3.610021
408	3.610660	3.610767	3.610873	3.610979	3.611086
409	3.611723	3.611829	3.611936	3.612042	3.612148
410	3.612784	3.612890	3.612996	3.613102	3.613207
411	3.613842	3.613947	3.614053	3.614159	3.614264
412	3.614897	3.615003	3.615108	3.615213	3.615319
413	3.615950	3.616055	3.616160	3.616265	3.616370
414	3.617000	3.617105	3.617210	3.617315	3.617420
415	3.618048	3.618153	3.618257	3.618362	3.618466
416	3.619093	3.619198	3.619302	3.619406	3.619511
417	3.620136	3.620240	3.620344	3.620448	3.620552
418	3.621176	3.621280	3.621384	3.621488	3.621592
419	3.622214	3.622317	3.622421	3.622525	3.622628
420	3.623249	3.623353	3.623456	3.623559	3.623663
421	3.624282	3.624385	3.624488	3.624591	3.624695
422	3.625312	3.625415	3.625518	3.625621	3.625724
423	3.626340	3.626443	3.626546	3.626648	3.626751
424	3.627366	3.627468	3.627571	3.627673	3.627775
425	3.628389	3.628491	3.628593	3.628695	3.628797
426	3.629410	3.629512	3.629613	3.629715	3.629817
427	3.630428	3.630530	3.630631	3.630733	3.630835
428	3.631444	3.631545	3.631647	3.631748	3.631849
429	3.632457	3.632559	3.632660	3.632761	3.632862
430	3.633468	3.633569	3.633670	3.633771	3.633872
431	3.634477	3.634578	3.634679	3.634779	3.634880
432	3.635484	3.635584	3.635685	3.635785	3.635886
433	3.636488	3.636588	3.636688	3.636789	3.636889
434	3.637490	3.637590	3.637690	3.637790	3.637890
435	3.638489	3.638589	3.638689	3.638789	3.638888
436	3.639486	3.639586	3.639686	3.639785	3.639885
437	3.640481	3.640581	3.640680	3.640779	3.640879
438	3.641474	3.641573	3.641672	3.641771	3.641871
439	3.642465	3.642563	3.642662	3.642761	3.642860

Common Logarithms.

23

5.00	6.00	7.00	8.00	9.00	D.
3.602603	3.602711	3.602819	3.602928	3.603036	108
3.603680	3.603794	3.603902	3.604010	3.604118	108
3.604766	3.604874	3.604982	3.605089	3.605197	108
3.605844	3.605951	3.606059	3.606166	3.606274	108
3.606919	3.607026	3.607133	3.607241	3.607348	107
3.607991	3.608098	3.608205	3.608312	3.608419	107
3.609061	3.609167	3.609274	3.609381	3.609488	107
3.610128	3.610234	3.610341	3.610447	3.610554	107
3.611192	3.611298	3.611405	3.611511	3.611617	106
3.612254	3.612360	3.612466	3.612572	3.612678	106
3.613313	3.613419	3.613525	3.613630	3.613736	106
3.614370	3.614475	3.614581	3.614686	3.614792	106
3.615424	3.615529	3.615634	3.615740	3.615845	105
3.616476	3.616581	3.616686	3.616790	3.616895	105
3.617525	3.617629	3.617734	3.617839	3.617943	105
3.618571	3.618676	3.618780	3.618884	3.618989	105
3.619615	3.619719	3.619824	3.619928	3.620032	104
3.620656	3.620760	3.620864	3.620968	3.621072	104
3.621695	3.621799	3.621903	3.622007	3.622110	104
3.622732	3.622835	3.622939	3.623042	3.623146	104
3.623766	3.623869	3.623973	3.624076	3.624179	103
3.624798	3.624901	3.625004	3.625107	3.625210	103
3.625827	3.625929	3.626032	3.626135	3.626238	103
3.626853	3.626956	3.627058	3.627161	3.627263	103
3.627878	3.627980	3.628082	3.628185	3.628287	102
3.628900	3.629002	3.629104	3.629206	3.629308	102
3.629919	3.630021	3.630123	3.630224	3.630326	102
3.630936	3.631038	3.631139	3.631241	3.631342	102
3.631951	3.632052	3.632153	3.632255	3.632356	101
3.632963	3.633064	3.633165	3.633266	3.633367	101
3.633973	3.634074	3.634175	3.634276	3.634376	100
3.634981	3.635081	3.635182	3.635283	3.635383	100
3.635986	3.636087	3.636187	3.636287	3.636388	100
3.636989	3.637089	3.637189	3.637290	3.637390	100
3.637990	3.638090	3.638190	3.638290	3.638389	99
3.638988	3.639088	3.639188	3.639287	3.639387	99
3.639984	3.640084	3.640183	3.640283	3.640382	99
3.640978	3.641077	3.641177	3.641276	3.641375	99
3.641970	3.642069	3.642168	3.642267	3.642366	99
3.642959	3.643058	3.643156	3.643255	3.643354	99

N.	0.00	1.00	2.00	3.00	4.00
440	3.643453	3.643551	3.643650	3.643749	3.643847
441	3.644439	3.644537	3.644636	3.644734	3.644832
442	3.645422	3.645521	3.645619	3.645717	3.645815
443	3.646404	3.646502	3.646600	3.646698	3.646796
444	3.647383	3.647481	3.647579	3.647676	3.647774
445	3.648360	3.648458	3.648555	3.648653	3.648750
446	3.649335	3.649432	3.649530	3.649627	3.649724
447	3.650308	3.650405	3.650502	3.650599	3.650696
448	3.651278	3.651375	3.651472	3.651569	3.651666
449	3.652246	3.652343	3.652440	3.652536	3.652633
450	3.653213	3.653309	3.653405	3.653502	3.653598
451	3.654177	3.654273	3.654369	3.654465	3.654562
452	3.655138	3.655235	3.655331	3.655427	3.655523
453	3.656098	3.656194	3.656290	3.656386	3.656482
454	3.657056	3.657152	3.657247	3.657343	3.657438
455	3.658011	3.658107	3.658202	3.658298	3.658393
456	3.658965	3.659060	3.659155	3.659250	3.659346
457	3.659916	3.660011	3.660106	3.660201	3.660296
458	3.660865	3.660960	3.661055	3.661150	3.661245
459	3.661813	3.661907	3.662002	3.662096	3.662191
460	3.662758	3.662852	3.662947	3.663041	3.663135
461	3.663701	3.663795	3.663889	3.663983	3.664078
462	3.664642	3.664736	3.664830	3.664924	3.665018
463	3.665581	3.665675	3.665769	3.665862	3.665956
464	3.666518	3.666612	3.666705	3.666799	3.666892
465	3.667453	3.667546	3.667640	3.667733	3.667826
466	3.668386	3.668479	3.668572	3.668665	3.668759
467	3.669317	3.669410	3.669503	3.669596	3.669689
468	3.670246	3.670339	3.670431	3.670524	3.670617
469	3.671171	3.671265	3.671358	3.671451	3.671543
470	3.672098	3.672190	3.672283	3.672375	3.672467
471	3.673021	3.673113	3.673205	3.673297	3.673390
472	3.673942	3.674034	3.674126	3.674218	3.674310
473	3.674861	3.674953	3.675045	3.675137	3.675228
474	3.675778	3.675870	3.675962	3.676053	3.676145
475	3.676694	3.676785	3.676876	3.676968	3.677059
476	3.677607	3.677698	3.677789	3.677881	3.677972
477	3.678518	3.678609	3.678700	3.678791	3.678882
478	3.679428	3.679519	3.679610	3.679700	3.679791
479	3.680336	3.680426	3.680517	3.680607	3.680698

Common Logarithms.

25

5.00	6.00	7.00	8.00	9.00	D.
3.643946	3.644044	3.644143	3.644242	3.644340	98
3.644931	3.645029	3.645127	3.645226	3.645324	98
3.645913	3.646011	3.646110	3.646208	3.646306	98
3.646894	3.646992	3.647089	3.647187	3.647285	98
3.647872	3.647969	3.648067	3.648165	3.648262	98
3.648848	3.648945	3.649043	3.649140	3.649237	97
3.649821	3.649919	3.650016	3.650113	3.650210	97
3.650793	3.650890	3.650987	3.651084	3.651181	97
3.651762	3.651859	3.651956	3.652053	3.652149	97
3.652730	3.652826	3.652923	3.653019	3.653116	97
3.653695	3.653791	3.653888	3.653984	3.654080	96
3.654658	3.654754	3.654850	3.654946	3.655042	96
3.655619	3.655715	3.655810	3.655906	3.656002	96
3.656577	3.656673	3.656769	3.656864	3.656960	96
3.657534	3.657629	3.657725	3.657820	3.657916	96
3.658488	3.658584	3.658679	3.658774	3.658870	95
3.659441	3.659536	3.659631	3.659726	3.659821	95
3.660391	3.660486	3.660581	3.660676	3.660771	95
3.661339	3.661434	3.661529	3.661623	3.661718	95
3.662286	3.662380	3.662475	3.662569	3.662663	95
3.663230	3.663324	3.663418	3.663512	3.663607	94
3.664172	3.664266	3.664360	3.664454	3.664548	94
3.665112	3.665206	3.665299	3.665393	3.665487	94
3.666050	3.666143	3.666237	3.666331	3.666424	94
3.666986	3.667079	3.667173	3.667266	3.667360	94
3.667920	3.668013	3.668106	3.668199	3.668293	93
3.668852	3.668945	3.669038	3.669131	3.669224	93
3.669782	3.669875	3.669967	3.670060	3.670153	93
3.670710	3.670802	3.670895	3.670988	3.671080	93
3.671636	3.671728	3.671821	3.671913	3.672005	93
3.672560	3.672652	3.672744	3.672836	3.672929	92
3.673482	3.673574	3.673666	3.673758	3.673850	92
3.674402	3.674494	3.674586	3.674677	3.674769	92
3.675320	3.675412	3.675503	3.675595	3.675687	92
3.676236	3.676328	3.676419	3.676511	3.676602	92
3.677151	3.677242	3.677333	3.677424	3.677516	91
3.678063	3.678154	3.678245	3.678336	3.678427	91
3.678973	3.679064	3.679155	3.679246	3.679337	91
3.679882	3.679973	3.680063	3.680154	3.680245	91
3.680789	3.680879	3.680970	3.681060	3.681151	91

N.	0.00	1.00	2.00	3.00	4.00
486	3.681241	3.681332	3.681422	3.681513	3.681603
487	3.682145	3.682235	3.682326	3.682416	3.682506
488	3.683047	3.683137	3.683227	3.683317	3.683407
489	3.683947	3.684037	3.684127	3.684217	3.684307
490	3.684845	3.684935	3.685025	3.685114	3.685204
491	3.685742	3.685831	3.685921	3.686010	3.686100
492	3.686636	3.686726	3.686815	3.686904	3.686994
493	3.687529	3.687618	3.687707	3.687796	3.687886
494	3.688420	3.688509	3.688598	3.688687	3.688776
495	3.689309	3.689398	3.689486	3.689575	3.689664
496	3.690196	3.690285	3.690373	3.690462	3.690550
497	3.691081	3.691170	3.691258	3.691347	3.691435
498	3.691965	3.692053	3.692142	3.692230	3.692318
499	3.692847	3.692935	3.693023	3.693111	3.693199
500	3.693727	3.693815	3.693903	3.693991	3.694078
501	3.694605	3.694693	3.694781	3.694868	3.694956
502	3.695482	3.695569	3.695657	3.695744	3.695832
503	3.696356	3.696444	3.696531	3.696618	3.696706
504	3.697229	3.697317	3.697404	3.697491	3.697578
505	3.698101	3.698188	3.698275	3.698362	3.698449
506	3.698970	3.699057	3.699144	3.699231	3.699317
507	3.699838	3.699924	3.700011	3.700098	3.700184
508	3.700704	3.700790	3.700877	3.700963	3.701050
509	3.701568	3.701654	3.701741	3.701827	3.701913
510	3.702431	3.702517	3.702603	3.702689	3.702775
511	3.703291	3.703377	3.703463	3.703549	3.703635
512	3.704151	3.704236	3.704322	3.704408	3.704494
513	3.705008	3.705094	3.705179	3.705265	3.705350
514	3.705864	3.705949	3.706035	3.706120	3.706206
515	3.706718	3.706803	3.706888	3.706974	3.707059
516	3.707570	3.707655	3.707740	3.707826	3.707911
517	3.708421	3.708506	3.708591	3.708676	3.708761
518	3.709270	3.709355	3.709440	3.709524	3.709609
519	3.710117	3.710202	3.710287	3.710371	3.710456
520	3.710963	3.711048	3.711132	3.711217	3.711301
521	3.711807	3.711892	3.711976	3.712060	3.712144
522	3.712650	3.712734	3.712818	3.712902	3.712986
523	3.713491	3.713575	3.713659	3.713742	3.713826
524	3.714330	3.714414	3.714497	3.714581	3.714665
525	3.715167	3.715251	3.715335	3.715418	3.715502

Common Logarithms.

27

5.00	6.00	7.00	8.00	9.00	D.
3.681693	3.681784	3.681874	3.681964	3.682055	90
3.682596	3.682686	3.682777	3.682867	3.682957	90
3.683497	3.683587	3.683677	3.683767	3.683857	90
3.684396	3.684486	3.684576	3.684666	3.684756	90
3.685294	3.685383	3.685473	3.685563	3.685652	90
3.686189	3.686279	3.686368	3.686458	3.686547	89
3.687083	3.687172	3.687261	3.687351	3.687440	89
3.687975	3.688064	3.688153	3.688242	3.688331	89
3.688865	3.688953	3.689042	3.689131	3.689220	89
3.689753	3.689841	3.689930	3.690019	3.690107	89
3.690639	3.690728	3.690816	3.690905	3.690993	89
3.691524	3.691612	3.691700	3.691789	3.691877	88
3.692406	3.692494	3.692583	3.692671	3.692759	89
3.693287	3.693375	3.693463	3.693551	3.693639	88
3.694166	3.694254	3.694342	3.694430	3.694517	88
3.695044	3.695131	3.695219	3.695307	3.695394	88
3.695919	3.696007	3.696094	3.696182	3.696269	87
3.696793	3.696880	3.696968	3.697055	3.697142	87
3.697665	3.697752	3.697839	3.697926	3.698014	87
3.698535	3.698622	3.698709	3.698796	3.698883	87
3.699404	3.699491	3.699578	3.699664	3.699751	87
3.700271	3.700358	3.700444	3.700531	3.700617	87
3.701136	3.701222	3.701309	3.701395	3.701482	86
3.701999	3.702086	3.702172	3.702258	3.702344	86
3.702861	3.702947	3.703033	3.703119	3.703205	86
3.703721	3.703807	3.703893	3.703979	3.704065	86
3.704579	3.704665	3.704751	3.704837	3.704922	86
3.705436	3.705522	3.705607	3.705693	3.705778	86
3.706291	3.706376	3.706462	3.706547	3.706632	85
3.707144	3.707229	3.707315	3.707400	3.707485	85
3.707996	3.708081	3.708166	3.708251	3.708336	85
3.708846	3.708931	3.709015	3.709100	3.709185	85
3.709694	3.709779	3.709863	3.709948	3.710033	85
3.710540	3.710625	3.710710	3.710794	3.710879	85
3.711385	3.711470	3.711554	3.711639	3.711723	85
3.712229	3.712313	3.712397	3.712481	3.712566	84
3.713070	3.713154	3.713238	3.713323	3.713407	84
3.713910	3.713994	3.714078	3.714162	3.714246	84
3.714749	3.714833	3.714916	3.715000	3.715084	84
3.715586	3.715669	3.715753	3.715836	3.715920	84

N.	0.00	1.00	2.00	3.00	4.00
520	3.716003	3.716087	3.716170	3.716254	3.716337
521	3.716838	3.716921	3.717004	3.717088	3.717171
522	3.717671	3.717754	3.717837	3.717920	3.718003
523	3.718502	3.718585	3.718668	3.718751	3.718834
524	3.719331	3.719414	3.719497	3.719580	3.719663
525	3.720159	3.720242	3.720325	3.720407	3.720490
526	3.720986	3.721068	3.721151	3.721233	3.721316
527	3.721811	3.721893	3.721975	3.722058	3.722140
528	3.722634	3.722716	3.722798	3.722881	3.722963
529	3.723456	3.723538	3.723620	3.723702	3.723784
530	3.724276	3.724358	3.724440	3.724522	3.724604
531	3.725095	3.725176	3.725258	3.725340	3.725422
532	3.725912	3.725993	3.726075	3.726156	3.726238
533	3.726727	3.726809	3.726890	3.726972	3.727053
534	3.727541	3.727623	3.727704	3.727785	3.727866
535	3.728354	3.728435	3.728516	3.728597	3.728678
536	3.729165	3.729246	3.729327	3.729408	3.729489
537	3.729974	3.730055	3.730136	3.730217	3.730298
538	3.730782	3.730863	3.730944	3.731024	3.731105
539	3.731589	3.731669	3.731750	3.731830	3.731911
540	3.732394	3.732474	3.732555	3.732635	3.732715
541	3.733197	3.733278	3.733358	3.733438	3.733518
542	3.733999	3.734079	3.734160	3.734240	3.734320
543	3.734800	3.734880	3.734960	3.735040	3.735120
544	3.735599	3.735679	3.735759	3.735838	3.735918
545	3.736397	3.736476	3.736556	3.736635	3.736715
546	3.737193	3.737272	3.737352	3.737431	3.737511
547	3.737987	3.738067	3.738146	3.738225	3.738305
548	3.738781	3.738860	3.738939	3.739018	3.739097
549	3.739572	3.739651	3.739731	3.739810	3.739889
550	3.740363	3.740442	3.740521	3.740600	3.740678
551	3.741152	3.741230	3.741309	3.741388	3.741467
552	3.741939	3.742018	3.742096	3.742175	3.742254
553	3.742725	3.742804	3.742882	3.742961	3.743039
554	3.743510	3.743588	3.743667	3.743745	3.743823
555	3.744293	3.744371	3.744449	3.744528	3.744606
556	3.745075	3.745153	3.745231	3.745309	3.745387
557	3.745855	3.745933	3.746011	3.746089	3.746167
558	3.746634	3.746712	3.746790	3.746868	3.746945
559	3.747412	3.747489	3.747567	3.747645	3.747722

Common Logarithms.

29

5.00	6.00	7.00	8.00	9.00	D.
3.716421	3.716504	3.716588	3.716671	3.716754	83
3.717254	3.717338	3.717421	3.717504	3.717587	83
3.718086	3.718169	3.718253	3.718336	3.718419	83
3.718917	3.719000	3.719083	3.719165	3.719248	83
3.719745	3.719828	3.719911	3.719994	3.720077	83
3.720573	3.720655	3.720738	3.720821	3.720903	83
3.721398	3.721481	3.721563	3.721645	3.721728	82
3.722222	3.722305	3.722387	3.722469	3.722552	82
3.723045	3.723127	3.723209	3.723291	3.723374	82
3.723866	3.723948	3.724030	3.724112	3.724194	82
3.724685	3.724767	3.724849	3.724931	3.725013	82
3.725503	3.725585	3.725667	3.725748	3.725830	82
3.726320	3.726401	3.726483	3.726564	3.726646	82
3.727134	3.727216	3.727297	3.727379	3.727460	81
3.727948	3.728029	3.728110	3.728191	3.728273	81
3.728759	3.728841	3.728922	3.729003	3.729084	81
3.729570	3.729651	3.729732	3.729813	3.729893	81
3.730378	3.730459	3.730540	3.730621	3.730702	81
3.731186	3.731266	3.731347	3.731428	3.731508	81
3.731991	3.732072	3.732152	3.732233	3.732313	81
3.732796	3.732876	3.732956	3.733037	3.733117	80
3.733598	3.733679	3.733759	3.733839	3.733919	80
3.734400	3.734480	3.734560	3.734640	3.734720	80
3.735200	3.735279	3.735359	3.735439	3.735519	80
3.735998	3.736078	3.736157	3.736237	3.736317	80
3.736795	3.736874	3.736954	3.737034	3.737113	80
3.737590	3.737670	3.737749	3.737829	3.737908	79
3.738384	3.738463	3.738543	3.738622	3.738701	79
3.739177	3.739256	3.739335	3.739414	3.739493	79
3.739968	3.740047	3.740126	3.740205	3.740284	79
3.740757	3.740836	3.740915	3.740994	3.741073	79
3.741546	3.741624	3.741703	3.741782	3.741860	79
3.742332	3.742411	3.742489	3.742568	3.742647	79
3.743118	3.743196	3.743275	3.743353	3.743431	78
3.743902	3.743980	3.744058	3.744136	3.744215	78
3.744684	3.744762	3.744840	3.744919	3.744997	78
3.745465	3.745543	3.745621	3.745699	3.745777	78
3.746245	3.746323	3.746401	3.746479	3.746556	78
3.747023	3.747101	3.747179	3.747256	3.747334	78
3.747800	3.747878	3.747955	3.748033	3.748110	78

N.	0.00	1.00	2.00	3.00	4.00
560	3.748188	3.748266	3.748343	3.748421	3.748498
561	3.748963	3.749040	3.749118	3.749195	3.749272
562	3.749736	3.749814	3.749891	3.749968	3.750045
563	3.750508	3.750586	3.750663	3.750740	3.750817
564	3.751279	3.751356	3.751433	3.751510	3.751587
565	3.752048	3.752125	3.752202	3.752279	3.752356
566	3.752816	3.752893	3.752970	3.753047	3.753123
567	3.753583	3.753660	3.753736	3.753813	3.753889
568	3.754348	3.754425	3.754501	3.754578	3.754654
569	3.755112	3.755189	3.755265	3.755341	3.755417
570	3.755875	3.755951	3.756027	3.756103	3.756180
571	3.756636	3.756712	3.756788	3.756864	3.756940
572	3.757396	3.757472	3.757548	3.757624	3.757700
573	3.758155	3.758230	3.758306	3.758382	3.758458
574	3.758912	3.758988	3.759063	3.759139	3.759214
575	3.759668	3.759743	3.759819	3.759894	3.759970
576	3.760422	3.760498	3.760573	3.760649	3.760724
577	3.761176	3.761251	3.761326	3.761402	3.761477
578	3.761928	3.762003	3.762078	3.762153	3.762228
579	3.762679	3.762754	3.762829	3.762904	3.762978
580	3.763428	3.763503	3.763578	3.763653	3.763727
581	3.764176	3.764251	3.764326	3.764400	3.764475
582	3.764923	3.764998	3.765072	3.765147	3.765221
583	3.765669	3.765743	3.765818	3.765892	3.765966
584	3.766413	3.766487	3.766562	3.766636	3.766710
585	3.767156	3.767230	3.767304	3.767379	3.767453
586	3.767898	3.767972	3.768046	3.768120	3.768194
587	3.768638	3.768712	3.768786	3.768860	3.768934
588	3.769377	3.769451	3.769525	3.769599	3.769673
589	3.770115	3.770189	3.770263	3.770336	3.770410
590	3.770852	3.770926	3.770999	3.771073	3.771146
591	3.771587	3.771661	3.771734	3.771808	3.771881
592	3.772322	3.772395	3.772468	3.772542	3.772615
593	3.773055	3.773128	3.773201	3.773274	3.773348
594	3.773786	3.773860	3.773933	3.774006	3.774079
595	3.774517	3.774590	3.774663	3.774736	3.774809
596	3.775246	3.775319	3.775392	3.775465	3.775538
597	3.775974	3.776047	3.776120	3.776193	3.776265
598	3.776701	3.776774	3.776846	3.776919	3.776992
599	3.777427	3.777499	3.777572	3.777644	3.777717

Common Logarithms.

31

5.00	6.00	7.00	8.00	9.00	D.
3.748576	3.748653	3.748731	3.748808	3.748885	77
3.749350	3.749427	3.749504	3.749582	3.749659	77
3.750123	3.750200	3.750277	3.750354	3.750431	77
3.750894	3.750971	3.751048	3.751125	3.751202	77
3.751664	3.751741	3.751818	3.751895	3.751972	77
3.752433	3.752509	3.752586	3.752663	3.752740	77
3.753200	3.753277	3.753353	3.753430	3.753506	77
3.753966	3.754042	3.754119	3.754195	3.754272	77
3.754730	3.754807	3.754883	3.754960	3.755036	76
3.755494	3.755570	3.755646	3.755722	3.755799	76
3.756256	3.756332	3.756408	3.756484	3.756560	76
3.757016	3.757092	3.757168	3.757244	3.757320	76
3.757775	3.757851	3.757927	3.758003	3.758079	76
3.758533	3.758609	3.758685	3.758761	3.758836	76
3.759290	3.759366	3.759441	3.759517	3.759592	76
3.760045	3.760121	3.760196	3.760272	3.760347	75
3.760799	3.760875	3.760950	3.761025	3.761101	75
3.761552	3.761627	3.761702	3.761778	3.761853	75
3.762303	3.762378	3.762453	3.762529	3.762604	75
3.763053	3.763128	3.763203	3.763278	3.763353	75
3.763802	3.763877	3.763952	3.764027	3.764101	75
3.764550	3.764624	3.764699	3.764774	3.764848	75
3.765296	3.765370	3.765445	3.765520	3.765594	75
3.766041	3.766115	3.766190	3.766264	3.766338	74
3.766785	3.766859	3.766933	3.767007	3.767082	74
3.767527	3.767601	3.767675	3.767749	3.767823	74
3.768268	3.768342	3.768416	3.768490	3.768564	75
3.769008	3.769082	3.769156	3.769230	3.769303	74
3.769746	3.769820	3.769894	3.769968	3.770042	74
3.770484	3.770557	3.770631	3.770705	3.770778	74
3.771220	3.771293	3.771367	3.771440	3.771514	74
3.771955	3.772028	3.772102	3.772175	3.772248	73
3.772688	3.772762	3.772835	3.772908	3.772981	73
3.773421	3.773494	3.773567	3.773640	3.773713	73
3.774152	3.774225	3.774298	3.774371	3.774444	73
3.774882	3.774955	3.775028	3.775100	3.775173	73
3.775610	3.775683	3.775756	3.775829	3.775902	73
3.776338	3.776411	3.776483	3.776556	3.776629	73
3.777064	3.777137	3.777209	3.777282	3.777354	73
3.777789	3.777862	3.777934	3.778006	3.778079	73

N.	0.00	1.00	2.00	3.00	4.00
600	3.778151	3.778224	3.778296	3.778368	3.778441
601	3.778874	3.778947	3.779019	3.779091	3.779163
602	3.779596	3.779669	3.779741	3.779813	3.779885
603	3.780317	3.780389	3.780461	3.780533	3.780605
604	3.781037	3.781109	3.781181	3.781253	3.781324
605	3.781755	3.781827	3.781899	3.781971	3.782042
606	3.782473	3.782544	3.782616	3.782688	3.782759
607	3.783189	3.783260	3.783332	3.783403	3.783475
608	3.783904	3.783975	3.784046	3.784118	3.784189
609	3.784617	3.784689	3.784760	3.784831	3.784902
610	3.785330	3.785401	3.785472	3.785543	3.785615
611	3.786041	3.786112	3.786183	3.786254	3.786325
612	3.786751	3.786822	3.786893	3.786964	3.787035
613	3.787460	3.787531	3.787602	3.787673	3.787744
614	3.788168	3.788239	3.788310	3.788381	3.788451
615	3.788875	3.788946	3.789016	3.789087	3.789157
616	3.789581	3.789651	3.789722	3.789792	3.789863
617	3.790285	3.790356	3.790426	3.790496	3.790567
618	3.790988	3.791059	3.791129	3.791199	3.791269
619	3.791691	3.791761	3.791831	3.791901	3.791971
620	3.792392	3.792462	3.792532	3.792602	3.792672
621	3.793092	3.793162	3.793231	3.793301	3.793371
622	3.793791	3.793860	3.793930	3.794000	3.794070
623	3.794488	3.794558	3.794627	3.794697	3.794767
624	3.795185	3.795254	3.795324	3.795393	3.795463
625	3.795880	3.795949	3.796019	3.796088	3.796158
626	3.796574	3.796644	3.796713	3.796782	3.796852
627	3.797268	3.797337	3.797406	3.797475	3.797545
628	3.797960	3.798029	3.798098	3.798167	3.798236
629	3.798651	3.798720	3.798789	3.798858	3.798927
630	3.799341	3.799409	3.799478	3.799547	3.799616
631	3.800029	3.800098	3.800167	3.800236	3.800305
632	3.800717	3.800786	3.800854	3.800923	3.800992
633	3.801404	3.801472	3.801541	3.801609	3.801678
634	3.802089	3.802158	3.802226	3.802295	3.802363
635	3.802774	3.802842	3.802910	3.802979	3.803047
636	3.803457	3.803525	3.803594	3.803662	3.803730
637	3.804139	3.804208	3.804276	3.804344	3.804412
638	3.804821	3.804889	3.804957	3.805025	3.805093
639	3.805501	3.805569	3.805637	3.805705	3.805773

Common Logarithms.

33

5.00	6.00	7.00	8.00	9.00	D.
3.778513	3.778585	3.778658	3.778730	3.778802	72
3.779236	3.779308	3.779380	3.779452	3.779524	72
3.779957	3.780029	3.780101	3.780173	3.780245	72
3.780677	3.780749	3.780821	3.780893	3.780965	72
3.781396	3.781468	3.781540	3.781612	3.781684	72
3.782114	3.782186	3.782258	3.782330	3.782401	72
3.782831	3.782902	3.782974	3.783046	3.783117	72
3.783546	3.783618	3.783689	3.783761	3.783832	71
3.784261	3.784332	3.784403	3.784475	3.784546	71
3.784974	3.785045	3.785116	3.785187	3.785259	71
3.785686	3.785757	3.785828	3.785899	3.785970	71
3.786396	3.786467	3.786538	3.786609	3.786680	71
3.787106	3.787177	3.787248	3.787319	3.787390	71
3.787815	3.787885	3.787956	3.788027	3.788098	71
3.788522	3.788593	3.788663	3.788734	3.788804	71
3.789228	3.789299	3.789369	3.789440	3.789510	71
3.789933	3.790004	3.790074	3.790144	3.790215	70
3.790637	3.790707	3.790778	3.790848	3.790918	70
3.791340	3.791410	3.791480	3.791550	3.791620	70
3.792041	3.792111	3.792181	3.792252	3.792322	70
3.792742	3.792812	3.792881	3.792952	3.793022	70
3.793441	3.793511	3.793581	3.793651	3.793721	70
3.794139	3.794209	3.794279	3.794349	3.794418	70
3.794836	3.794906	3.794976	3.795045	3.795115	70
3.795532	3.795602	3.795672	3.795741	3.795811	70
3.796227	3.796297	3.796366	3.796436	3.796505	69
3.796921	3.796990	3.797060	3.797129	3.797198	69
3.797614	3.797683	3.797752	3.797821	3.797890	69
3.798305	3.798374	3.798443	3.798513	3.798582	69
3.798996	3.799065	3.799134	3.799203	3.799272	69
3.799685	3.799754	3.799823	3.799892	3.799961	69
3.800373	3.800442	3.800511	3.800580	3.800648	69
3.801061	3.801129	3.801198	3.801266	3.801335	69
3.801747	3.801815	3.801884	3.801952	3.802021	69
3.802432	3.802500	3.802568	3.802637	3.802705	68
3.803116	3.803184	3.803252	3.803321	3.803389	68
3.803798	3.803867	3.803935	3.804003	3.804071	68
3.804480	3.804548	3.804616	3.804685	3.804753	68
3.805161	3.805229	3.805297	3.805365	3.805433	68
3.805841	3.805908	3.805976	3.806044	3.806112	68

N.	0.00	1.00	2.00	3.00	4.00
600	3.778151	3.778224	3.778296	3.778368	3.778441
601	3.778874	3.778947	3.779019	3.779091	3.779163
602	3.779596	3.779669	3.779741	3.779813	3.779885
603	3.780317	3.780389	3.780461	3.780533	3.780605
604	3.781037	3.781109	3.781181	3.781253	3.781324
605	3.781755	3.781827	3.781899	3.781971	3.782042
606	3.782473	3.782544	3.782616	3.782688	3.782759
607	3.783189	3.783260	3.783332	3.783403	3.783475
608	3.783904	3.783975	3.784046	3.784118	3.784189
609	3.784617	3.784689	3.784760	3.784831	3.784902
610	3.785330	3.785401	3.785472	3.785543	3.785615
611	3.786041	3.786112	3.786183	3.786254	3.786325
612	3.786751	3.786822	3.786893	3.786964	3.787035
613	3.787460	3.787531	3.787602	3.787673	3.787744
614	3.788168	3.788239	3.788310	3.788381	3.788451
615	3.788875	3.788946	3.789016	3.789087	3.789157
616	3.789581	3.789651	3.789722	3.789792	3.789863
617	3.790285	3.790356	3.790426	3.790496	3.790567
618	3.790988	3.791059	3.791129	3.791199	3.791269
619	3.791691	3.791761	3.791831	3.791901	3.791971
620	3.792392	3.792462	3.792532	3.792602	3.792672
621	3.793092	3.793162	3.793231	3.793301	3.793371
622	3.793791	3.793860	3.793930	3.794000	3.794070
623	3.794488	3.794558	3.794627	3.794697	3.794767
624	3.795185	3.795254	3.795324	3.795393	3.795463
625	3.795880	3.795949	3.796019	3.796088	3.796158
626	3.796574	3.796644	3.796713	3.796782	3.796852
627	3.797268	3.797337	3.797406	3.797475	3.797545
628	3.797960	3.798029	3.798098	3.798167	3.798236
629	3.798651	3.798720	3.798789	3.798858	3.798927
630	3.799341	3.799409	3.799478	3.799547	3.799616
631	3.800029	3.800098	3.800167	3.800236	3.800305
632	3.800717	3.800786	3.800854	3.800923	3.800992
633	3.801404	3.801472	3.801541	3.801609	3.801678
634	3.802089	3.802158	3.802226	3.802295	3.802363
635	3.802774	3.802842	3.802910	3.802979	3.803047
636	3.803457	3.803525	3.803594	3.803662	3.803730
637	3.804139	3.804208	3.804276	3.804344	3.804412
638	3.804821	3.804889	3.804957	3.805025	3.805093
639	3.805501	3.805569	3.805637	3.805705	3.805773

Common Logarithms.

33

5.00	6.00	7.00	8.00	9.00	D.
3.778513	3.778585	3.778658	3.778730	3.778802	72
3.779236	3.779308	3.779380	3.779452	3.779524	72
3.779957	3.780029	3.780101	3.780173	3.780245	72
3.780677	3.780749	3.780821	3.780893	3.780965	72
3.781396	3.781468	3.781540	3.781612	3.781684	72
3.782114	3.782186	3.782258	3.782330	3.782401	72
3.782831	3.782902	3.782974	3.783046	3.783117	72
3.783546	3.783618	3.783689	3.783761	3.783832	71
3.784261	3.784332	3.784403	3.784475	3.784546	71
3.784974	3.785045	3.785116	3.785187	3.785259	71
3.785686	3.785757	3.785828	3.785899	3.785970	71
3.786396	3.786467	3.786538	3.786609	3.786680	71
3.787106	3.787177	3.787248	3.787319	3.787390	71
3.787815	3.787885	3.787956	3.788027	3.788098	71
3.788522	3.788593	3.788663	3.788734	3.788804	71
3.789228	3.789299	3.789369	3.789440	3.789510	71
3.789933	3.790004	3.790074	3.790144	3.790215	70
3.790637	3.790707	3.790778	3.790848	3.790918	70
3.791340	3.791410	3.791480	3.791550	3.791620	70
3.792041	3.792111	3.792181	3.792252	3.792322	70
3.792742	3.792812	3.792881	3.792952	3.793022	70
3.793441	3.793511	3.793581	3.793651	3.793721	70
3.794139	3.794209	3.794279	3.794349	3.794418	70
3.794836	3.794906	3.794976	3.795045	3.795115	70
3.795532	3.795602	3.795672	3.795741	3.795811	70
3.796227	3.796297	3.796366	3.796436	3.796505	69
3.796921	3.796990	3.797060	3.797129	3.797198	69
3.797614	3.797683	3.797752	3.797821	3.797890	69
3.798305	3.798374	3.798443	3.798513	3.798582	69
3.798996	3.799065	3.799134	3.799203	3.799272	69
3.799685	3.799754	3.799823	3.799892	3.799961	69
3.800373	3.800442	3.800511	3.800580	3.800648	69
3.801061	3.801129	3.801198	3.801266	3.801335	69
3.801747	3.801815	3.801884	3.801952	3.802021	69
3.802432	3.802500	3.802568	3.802637	3.802705	68
3.803116	3.803184	3.803252	3.803321	3.803389	68
3.803798	3.803867	3.803935	3.804003	3.804071	68
3.804480	3.804548	3.804616	3.804685	3.804753	68
3.805161	3.805229	3.805297	3.805365	3.805433	68
3.805841	3.805908	3.805976	3.806044	3.806112	68

N.	0.00	1.00	2.00	3.00	4.00
640	3.806180	3.806248	3.806316	3.806384	3.806451
641	3.806858	3.806926	3.806994	3.807061	3.807129
642	3.807535	3.807603	3.807670	3.807738	3.807806
643	3.808211	3.808279	3.808346	3.808414	3.808481
644	3.808886	3.808953	3.809021	3.809088	3.809156
645	3.809560	3.809627	3.809694	3.809762	3.809829
646	3.810233	3.810300	3.810367	3.810434	3.810501
647	3.810904	3.810971	3.811039	3.811106	3.811173
648	3.811575	3.811642	3.811709	3.811776	3.811843
649	3.812245	3.812312	3.812379	3.812445	3.812512
650	3.812913	3.812980	3.813047	3.813114	3.813181
651	3.813581	3.813648	3.813714	3.813781	3.813848
652	3.814248	3.814314	3.814381	3.814447	3.814514
653	3.814913	3.814980	3.815046	3.815113	3.815179
654	3.815578	3.815644	3.815711	3.815777	3.815843
655	3.816241	3.816308	3.816374	3.816440	3.816506
656	3.816904	3.816970	3.817036	3.817102	3.817169
657	3.817565	3.817631	3.817698	3.817764	3.817830
658	3.818226	3.818292	3.818358	3.818424	3.818490
659	3.818885	3.818951	3.819017	3.819083	3.819149
660	3.819544	3.819610	3.819676	3.819741	3.819807
661	3.820201	3.820267	3.820333	3.820399	3.820464
662	3.820858	3.820924	3.820989	3.821055	3.821120
663	3.821514	3.821579	3.821645	3.821710	3.821775
664	3.822168	3.822233	3.822299	3.822364	3.822430
665	3.822822	3.822887	3.822952	3.823018	3.823083
666	3.823474	3.823539	3.823605	3.823670	3.823735
667	3.824126	3.824191	3.824256	3.824321	3.824386
668	3.824776	3.824841	3.824906	3.824971	3.825036
669	3.825426	3.825491	3.825556	3.825621	3.825686
670	3.826075	3.826140	3.826204	3.826269	3.826334
671	3.826723	3.826787	3.826852	3.826917	3.826981
672	3.827369	3.827434	3.827499	3.827563	3.827628
673	3.828015	3.828080	3.828144	3.828209	3.828273
674	3.828660	3.828724	3.828789	3.828853	3.828918
675	3.829304	3.829368	3.829432	3.829497	3.829561
676	3.829947	3.830011	3.830075	3.830139	3.830204
677	3.830589	3.830653	3.830717	3.830781	3.830845
678	3.831230	3.831294	3.831358	3.831422	3.831485
679	3.831870	3.831934	3.831998	3.832062	3.832126

Common Logarithms.

35

5.00	6.00	7.00	8.00	9.00	D.
3.806519	3.806587	3.806655	3.806723	3.806790	68
3.807197	3.807264	3.807332	3.807400	3.807467	68
3.807873	3.807941	3.808008	3.808076	3.808143	68
3.808549	3.808616	3.808684	3.808751	3.808818	67
3.809223	3.809290	3.809358	3.809425	3.809492	67
3.809896	3.809964	3.810031	3.810098	3.810165	67
3.810569	3.810636	3.810703	3.810770	3.810837	67
3.811240	3.811307	3.811374	3.811441	3.811508	67
3.811919	3.811977	3.812044	3.812111	3.812178	67
3.812579	3.812646	3.812713	3.812780	3.812847	67
3.813247	3.813314	3.813381	3.813448	3.813514	66
3.813914	3.813981	3.814048	3.814114	3.814181	66
3.814581	3.814647	3.814714	3.814780	3.814847	66
3.815246	3.815312	3.815378	3.815445	3.815511	66
3.815910	3.815976	3.816042	3.816109	3.816175	66
3.816573	3.816639	3.816705	3.816771	3.816838	66
3.817235	3.817301	3.817367	3.817433	3.817499	66
3.817896	3.817962	3.818028	3.818094	3.818160	66
3.818556	3.818622	3.818688	3.818754	3.818820	66
3.819215	3.819281	3.819346	3.819412	3.819478	66
3.819873	3.819939	3.820004	3.820070	3.820136	66
3.820530	3.820595	3.820661	3.820727	3.820792	66
3.821186	3.821251	3.821317	3.821382	3.821448	66
3.821841	3.821906	3.821972	3.822037	3.822103	65
3.822495	3.822560	3.822626	3.822691	3.822757	65
3.823148	3.823213	3.823279	3.823344	3.823409	65
3.823800	3.823865	3.823930	3.823996	3.824061	65
3.824451	3.824516	3.824581	3.824646	3.824711	65
3.825101	3.825166	3.825231	3.825296	3.825361	65
3.825751	3.825815	3.825880	3.825945	3.826010	65
3.826399	3.826464	3.826528	3.826593	3.826658	65
3.827046	3.827111	3.827175	3.827240	3.827305	65
3.827692	3.827757	3.827821	3.827886	3.827951	65
3.828338	3.828402	3.828467	3.828531	3.828595	64
3.828982	3.829046	3.829111	3.829175	3.829239	64
3.829625	3.829690	3.829754	3.829818	3.829882	64
3.830268	3.830332	3.830396	3.830460	3.830525	64
3.830909	3.830973	3.831037	3.831102	3.831166	64
3.831550	3.831614	3.831678	3.831742	3.831806	64
3.832189	3.832253	3.832317	3.832381	3.832445	64

N.	0.00	1.00	2.00	3.00	4.00
680	3.832509	3.832573	3.832637	3.832700	3.832764
681	3.833147	3.833211	3.833275	3.833338	3.833402
682	3.833784	3.833848	3.833912	3.833975	3.834039
683	3.834421	3.834484	3.834548	3.834611	3.834675
684	3.835056	3.835120	3.835183	3.835247	3.835310
685	3.835691	3.835754	3.835817	3.835881	3.835944
686	3.836324	3.836387	3.836451	3.836514	3.836577
687	3.836957	3.837020	3.837083	3.837146	3.837210
688	3.837588	3.837652	3.837715	3.837778	3.837841
689	3.838219	3.838282	3.838345	3.838408	3.838471
690	3.838849	3.838912	3.838975	3.839038	3.839101
691	3.839478	3.839541	3.839604	3.839667	3.839729
692	3.840106	3.840169	3.840232	3.840294	3.840357
693	3.840733	3.840796	3.840859	3.840921	3.840984
694	3.841359	3.841422	3.841485	3.841547	3.841610
695	3.841985	3.842047	3.842110	3.842172	3.842235
696	3.842609	3.842672	3.842734	3.842796	3.842859
697	3.843233	3.843295	3.843357	3.843420	3.843482
698	3.843835	3.843918	3.843979	3.844042	3.844104
699	3.844477	3.844539	3.844601	3.844664	3.844726
700	3.845098	3.845160	3.845222	3.845284	3.845346
701	3.845718	3.845780	3.845842	3.845904	3.845966
702	3.846337	3.846399	3.846461	3.846523	3.846585
703	3.846955	3.847017	3.847079	3.847141	3.847202
704	3.847573	3.847634	3.847696	3.847758	3.847819
705	3.848189	3.848251	3.848312	3.848374	3.848435
706	3.848805	3.848866	3.848928	3.848989	3.849051
707	3.849419	3.849481	3.849542	3.849604	3.849665
708	3.850033	3.850095	3.850156	3.850217	3.850279
709	3.850646	3.850707	3.850769	3.850830	3.850891
710	3.851258	3.851320	3.851381	3.851442	3.851503
711	3.851870	3.851931	3.851992	3.852053	3.852114
712	3.852480	3.852541	3.852602	3.852663	3.852724
713	3.853090	3.853150	3.853211	3.853272	3.853333
714	3.853698	3.853759	3.853820	3.853881	3.853941
715	3.854306	3.854367	3.854428	3.854488	3.854549
716	3.854913	3.854974	3.855034	3.855095	3.855156
717	3.855519	3.855580	3.855640	3.855701	3.855761
718	3.856124	3.856185	3.856245	3.856306	3.856366
719	3.856729	3.856789	3.856850	3.856910	3.856970

Common Logarithms.

37

5.00	6.00	7.00	8.00	9.00	D.
3.832828	3.832892	3.832956	3.833020	3.833083	64
3.833466	3.833530	3.833593	3.833657	3.833721	64
3.834103	3.834166	3.834230	3.834294	3.834357	64
3.834739	3.834802	3.834866	3.834929	3.834993	64
3.835373	3.835437	3.835500	3.835564	3.835627	63
3.836007	3.836071	3.836134	3.836197	3.836261	63
3.836641	3.836704	3.836767	3.836830	3.836894	63
3.837273	3.837336	3.837399	3.837462	3.837525	63
3.837904	3.837967	3.838030	3.838093	3.838156	63
3.838534	3.838597	3.838660	3.838723	3.838786	63
3.839164	3.839227	3.839289	3.839352	3.839415	63
3.839792	3.839855	3.839918	3.839981	3.840043	63
3.840420	3.840482	3.840545	3.840608	3.840671	63
3.841046	3.841109	3.841172	3.841234	3.841297	63
3.841672	3.841735	3.841797	3.841860	3.841922	63
3.842297	3.842360	3.842422	3.842484	3.842547	62
3.842921	3.842983	3.843046	3.843108	3.843170	62
3.843544	3.843606	3.843670	3.843731	3.843793	62
3.844166	3.844229	3.844291	3.844353	3.844415	62
3.844788	3.844850	3.844912	3.844974	3.845036	62
3.845408	3.845470	3.845532	3.845594	3.845656	62
3.846028	3.846090	3.846151	3.846213	3.846275	62
3.846646	3.846708	3.846770	3.846832	3.846894	62
3.847264	3.847326	3.847388	3.847449	3.847511	62
3.847881	3.847943	3.848004	3.848066	3.848128	62
3.848497	3.848559	3.848620	3.848682	3.848743	62
3.849112	3.849174	3.849235	3.849297	3.849358	61
3.849726	3.849788	3.849849	3.849911	3.849972	61
3.850340	3.850401	3.850462	3.850524	3.850585	61
3.850952	3.851014	3.851075	3.851136	3.851197	61
3.851564	3.851625	3.851686	3.851747	3.851809	61
3.852175	3.852236	3.852297	3.852358	3.852419	61
3.852785	3.852846	3.852907	3.852968	3.853029	61
3.853394	3.853455	3.853516	3.853577	3.853637	61
3.854002	3.854063	3.854124	3.854185	3.854245	62
3.854610	3.854670	3.854731	3.854792	3.854852	61
3.855216	3.855277	3.855337	3.855398	3.855459	61
3.855822	3.855882	3.855943	3.856003	3.856064	61
3.856427	3.856487	3.856548	3.856608	3.856668	60
3.857031	3.857091	3.857152	3.857212	3.857272	60

N.	0.00	1.00	2.00	3.00	4.00
720	3.857332	3.857393	3.857453	3.857513	3.857574
721	3.857935	3.857995	3.858056	3.858116	3.858176
722	3.858537	3.858597	3.858657	3.858718	3.858778
723	3.859138	3.859198	3.859258	3.859318	3.859379
724	3.859739	3.859799	3.859859	3.859918	3.859978
725	3.860338	3.860398	3.860458	3.860518	3.860578
726	3.860937	3.860996	3.861056	3.861116	3.861176
727	3.861534	3.861594	3.861654	3.861714	3.861773
728	3.862131	3.862191	3.862251	3.862310	3.862370
729	3.862728	3.862787	3.862847	3.862906	3.862966
730	3.863323	3.863382	3.863442	3.863501	3.863561
731	3.863917	3.863977	3.864036	3.864096	3.864155
732	3.864511	3.864570	3.864630	3.864689	3.864748
733	3.865104	3.865163	3.865222	3.865282	3.865341
734	3.865696	3.865755	3.865814	3.865874	3.865933
735	3.866287	3.866346	3.866405	3.866465	3.866524
736	3.866878	3.866937	3.866996	3.867055	3.867114
737	3.867467	3.867526	3.867585	3.867644	3.867703
738	3.868056	3.868115	3.868174	3.868233	3.868292
739	3.868644	3.868703	3.868762	3.868821	3.868879
740	3.869232	3.869290	3.869349	3.869408	3.869466
741	3.869818	3.869877	3.869935	3.869994	3.870053
742	3.870404	3.870462	3.870521	3.870579	3.870638
743	3.870989	3.871047	3.871106	3.871164	3.871223
744	3.871573	3.871631	3.871690	3.871748	3.871806
745	3.872156	3.872215	3.872273	3.872331	3.872389
746	3.872739	3.872797	3.872855	3.872913	3.872972
747	3.873321	3.873379	3.873437	3.873495	3.873553
748	3.873902	3.873960	3.874018	3.874076	3.874134
749	3.874482	3.874540	3.874598	3.874656	3.874714
750	3.875061	3.875119	3.875177	3.875235	3.875293
751	3.875640	3.875698	3.875756	3.875813	3.875871
752	3.876218	3.876276	3.876333	3.876391	3.876449
753	3.876795	3.876853	3.876910	3.876968	3.877026
754	3.877371	3.877429	3.877487	3.877544	3.877602
755	3.877947	3.878004	3.878062	3.878119	3.878177
756	3.878522	3.878579	3.878637	3.878694	3.878752
757	3.879096	3.879153	3.879211	3.879268	3.879325
758	3.879669	3.879726	3.879784	3.879841	3.879898
759	3.880242	3.880299	3.880356	3.880413	3.880471

Common Logarithms.

39

5.00	6.00	7.00	8.00	9.00	D.
3.857634	3.857694	3.857755	3.857815	3.857875	60
3.858236	3.858297	3.858357	3.858417	3.858477	60
3.858838	3.858898	3.858958	3.859018	3.859078	60
3.859439	3.859499	3.859559	3.859619	3.859679	60
3.860038	3.860098	3.860158	3.860218	3.860278	60
3.860637	3.860697	3.860757	3.860817	3.860877	60
3.861236	3.861295	3.861355	3.861415	3.861475	60
3.861833	3.861893	3.861952	3.862012	3.862072	60
3.862430	3.862489	3.862549	3.862608	3.862668	60
3.863025	3.863085	3.863144	3.863204	3.863263	60
3.863620	3.863680	3.863739	3.863799	3.863858	59
3.864214	3.864274	3.864333	3.864392	3.864452	59
3.864808	3.864867	3.864926	3.864985	3.865045	59
3.865400	3.865459	3.865519	3.865578	3.865637	59
3.865992	3.866051	3.866110	3.866169	3.866228	59
3.866583	3.866642	3.866701	3.866760	3.866819	59
3.867173	3.867232	3.867291	3.867350	3.867409	59
3.867762	3.867821	3.867880	3.867939	3.867998	59
3.868350	3.868409	3.868468	3.868527	3.868586	59
3.868938	3.868997	3.869057	3.869114	3.869173	59
3.869525	3.869584	3.869642	3.869701	3.869760	59
3.870111	3.870170	3.870228	3.870287	3.870345	59
3.870696	3.870755	3.870813	3.870872	3.870930	58
3.871281	3.871339	3.871398	3.871456	3.871515	58
3.871865	3.871923	3.871981	3.872040	3.872098	58
3.872448	3.872506	3.872564	3.872622	3.872681	58
3.873030	3.873088	3.873146	3.873204	3.873262	58
3.873611	3.873669	3.873727	3.873785	3.873844	58
3.874192	3.874250	3.874308	3.874366	3.874424	58
3.874772	3.874830	3.874888	3.874945	3.875003	58
3.875351	3.875409	3.875466	3.875524	3.875582	58
3.875929	3.875987	3.876045	3.876102	3.876160	58
3.876507	3.876564	3.876622	3.876680	3.876737	58
3.877083	3.877141	3.877199	3.877256	3.877314	58
3.877659	3.877717	3.877774	3.877832	3.877889	58
3.878234	3.878292	3.878349	3.878407	3.878464	57
3.878809	3.878866	3.878924	3.878981	3.879039	57
3.879383	3.879440	3.879497	3.879555	3.879612	57
3.879956	3.880013	3.880070	3.880127	3.880185	57
3.880528	3.880585	3.880642	3.880699	3.880756	57

N.	0.00	1.00	2.00	3.00	4.00
760	3.880814	3.880871	3.880928	3.880985	3.881042
761	3.881385	3.881442	3.881499	3.881556	3.881613
762	3.881955	3.882012	3.882069	3.882126	3.882183
763	3.882525	3.882581	3.882638	3.882695	3.882752
764	3.883093	3.883150	3.883207	3.883264	3.883321
765	3.883661	3.883718	3.883775	3.883832	3.883888
766	3.884229	3.884285	3.884342	3.884399	3.884455
767	3.884795	3.884852	3.884909	3.884965	3.885022
768	3.885361	3.885418	3.885474	3.885531	3.885587
769	3.885926	3.885983	3.886039	3.886096	3.886152
770	3.886491	3.886547	3.886604	3.886660	3.886716
771	3.887054	3.887111	3.887167	3.887223	3.887280
772	3.887617	3.887674	3.887730	3.887786	3.887842
773	3.888179	3.888236	3.888292	3.888348	3.888404
774	3.888741	3.888797	3.888853	3.888909	3.888965
775	3.889302	3.889358	3.889414	3.889470	3.889526
776	3.889862	3.889918	3.889974	3.890030	3.890086
777	3.890421	3.890477	3.890533	3.890589	3.890645
778	3.890980	3.891035	3.891091	3.891147	3.891203
779	3.891537	3.891593	3.891649	3.891705	3.891760
780	3.892095	3.892150	3.892206	3.892262	3.892317
781	3.892651	3.892707	3.892762	3.892818	3.892873
782	3.893207	3.893262	3.893318	3.893373	3.893429
783	3.893762	3.893817	3.893873	3.893928	3.893984
784	3.894316	3.894371	3.894427	3.894482	3.894538
785	3.894870	3.894925	3.894980	3.895036	3.895091
786	3.895423	3.895478	3.895533	3.895588	3.895644
787	3.895975	3.896030	3.896085	3.896140	3.896195
788	3.896526	3.896581	3.896636	3.896692	3.896747
789	3.897077	3.897132	3.897187	3.897242	3.897297
790	3.897627	3.897682	3.897737	3.897792	3.897847
791	3.898176	3.898231	3.898286	3.898341	3.898396
792	3.898725	3.898780	3.898835	3.898890	3.898944
793	3.899273	3.899328	3.899383	3.899437	3.899492
794	3.899821	3.899875	3.899929	3.899985	3.900040
795	3.900367	3.900422	3.900476	3.900531	3.900586
796	3.900913	3.900968	3.901022	3.901077	3.901131
797	3.901458	3.901513	3.901567	3.901622	3.901676
798	3.902003	3.902057	3.902112	3.902166	3.902221
799	3.902547	3.902601	3.902655	3.902710	3.902764

Common Logarithms.

41

5.00	6.00	7.00	8.00	9.00	D.
3.881099	3.881156	3.881213	3.881271	3.881328	57
3.881670	3.881727	3.881784	3.881841	3.881898	57
3.882240	3.882297	3.882354	3.882411	3.882468	57
3.882809	3.882866	3.882923	3.882980	3.883037	57
3.883377	3.883434	3.883491	3.883548	3.883605	57
3.883945	3.884002	3.884059	3.884115	3.884172	57
3.884512	3.884569	3.884625	3.884682	3.884739	57
3.885078	3.885135	3.885192	3.885248	3.885305	57
3.885644	3.885700	3.885757	3.885813	3.885870	57
3.886209	3.886265	3.886321	3.886378	3.886434	56
3.886773	3.886829	3.886885	3.886942	3.886998	56
3.887336	3.887392	3.887449	3.887505	3.887561	56
3.887898	3.887955	3.888011	3.888067	3.888123	56
3.888460	3.888516	3.888573	3.888629	3.888685	56
3.889021	3.889077	3.889134	3.889190	3.889246	56
3.889582	3.889638	3.889694	3.889750	3.889806	56
3.890141	3.890197	3.890253	3.890309	3.890365	56
3.890700	3.890756	3.890812	3.890868	3.890924	56
3.891259	3.891314	3.891370	3.891426	3.891482	56
3.891816	3.891872	3.891928	3.891983	3.892039	56
3.892373	3.892429	3.892484	3.892540	3.892595	56
3.892929	3.892985	3.893040	3.893096	3.893151	56
3.893484	3.893540	3.893595	3.893651	3.893706	56
3.894039	3.894094	3.894150	3.894205	3.894261	55
3.894593	3.894648	3.894704	3.894759	3.894814	55
3.895146	3.895201	3.895257	3.895312	3.895367	55
3.895700	3.895754	3.895809	3.895864	3.895920	55
3.896251	3.896306	3.896361	3.896416	3.896471	55
3.896802	3.896857	3.896912	3.896967	3.897022	55
3.897352	3.897407	3.897462	3.897517	3.897572	55
3.897902	3.897957	3.898012	3.898067	3.898122	55
3.898451	3.898506	3.898561	3.898615	3.898670	55
3.898999	3.899054	3.899109	3.899164	3.899218	55
3.899547	3.899602	3.899656	3.899711	3.899766	55
3.900094	3.900149	3.900203	3.900258	3.900312	55
3.900640	3.900695	3.900749	3.900804	3.900859	55
3.901186	3.901240	3.901295	3.901349	3.901404	55
3.901731	3.901785	3.901840	3.901894	3.901948	54
3.902275	3.902329	3.902384	3.902438	3.902492	54
3.902818	3.902873	3.902927	3.902981	3.903036	54

N.	0.00	1.00	2.00	3.00	4.00
800	3.903090	3.903144	3.903199	3.903253	3.903307
801	3.903633	3.903687	3.903741	3.903795	3.903849
802	3.904174	3.904229	3.904283	3.904337	3.904391
803	3.904716	3.904770	3.904824	3.904878	3.904932
804	3.905256	3.905310	3.905364	3.905418	3.905472
805	3.905796	3.905850	3.905904	3.905958	3.906012
806	3.906335	3.906389	3.906443	3.906497	3.906551
807	3.906874	3.906927	3.906981	3.907035	3.907089
808	3.907411	3.907465	3.907519	3.907573	3.907626
809	3.907949	3.908002	3.908056	3.908110	3.908163
810	3.908485	3.908539	3.908592	3.908646	3.908699
811	3.909021	3.909074	3.909128	3.909181	3.909235
812	3.909556	3.909610	3.909663	3.909716	3.909770
813	3.910091	3.910144	3.910197	3.910251	3.910304
814	3.910624	3.910678	3.910731	3.910784	3.910838
815	3.911158	3.911211	3.911264	3.911317	3.911371
816	3.911690	3.911743	3.911797	3.911850	3.911903
817	3.912222	3.912275	3.912328	3.912381	3.912435
818	3.912753	3.912806	3.912859	3.912913	3.912966
819	3.913284	3.913337	3.913390	3.913443	3.913496
820	3.913814	3.913867	3.913920	3.913973	3.914026
821	3.914343	3.914396	3.914449	3.914502	3.914555
822	3.914872	3.914925	3.914977	3.915030	3.915083
823	3.915400	3.915453	3.915505	3.915558	3.915611
824	3.915927	3.915980	3.916033	3.916085	3.916138
825	3.916454	3.916507	3.916559	3.916612	3.916664
826	3.916980	3.917033	3.917085	3.917138	3.917190
827	3.917506	3.917558	3.917611	3.917663	3.917716
828	3.918030	3.918083	3.918135	3.918188	3.918240
829	3.918555	3.918607	3.918659	3.918712	3.918764
830	3.919078	3.919130	3.919183	3.919235	3.919287
831	3.919601	3.919653	3.919705	3.919758	3.919810
832	3.920123	3.920176	3.920228	3.920280	3.920332
833	3.920645	3.920697	3.920749	3.920801	3.920853
834	3.921166	3.921218	3.921270	3.921322	3.921374
835	3.921686	3.921738	3.921790	3.921842	3.921894
836	3.922206	3.922258	3.922310	3.922362	3.922414
837	3.922725	3.922777	3.922829	3.922881	3.922933
838	3.923244	3.923296	3.923348	3.923399	3.923451
839	3.923762	3.923814	3.923865	3.923917	3.923969

Common Logarithms.

43

5.00	6.00	7.00	8.00	9.00	D.
3.903361	3.903416	3.903470	3.903524	3.903578	54
3.903904	3.903958	3.904012	3.904066	3.904120	54
3.904445	3.904499	3.904553	3.904607	3.904661	54
3.904986	3.905040	3.905094	3.905148	3.905202	54
3.905526	3.905580	3.905634	3.905688	3.905742	54
3.906066	3.906119	3.906173	3.906227	3.906281	54
3.906604	3.906658	3.906712	3.906766	3.906820	54
3.907143	3.907196	3.907250	3.907304	3.907358	54
3.907680	3.907734	3.907787	3.907841	3.907895	54
3.908217	3.908270	3.908324	3.908378	3.908431	54
3.908753	3.908807	3.908860	3.908914	3.908967	54
3.909289	3.909342	3.909396	3.909449	3.909503	54
3.909823	3.909877	3.909930	3.909984	3.910037	53
3.910358	3.910411	3.910464	3.910518	3.910571	53
3.910891	3.910944	3.910998	3.911051	3.911104	53
3.911424	3.911477	3.911530	3.911584	3.911637	53
3.911956	3.912009	3.912063	3.912116	3.912169	53
3.912488	3.912541	3.912594	3.912647	3.912700	53
3.913019	3.913072	3.913125	3.913178	3.913231	53
3.913549	3.913602	3.913655	3.913708	3.913761	53
3.914079	3.914132	3.914184	3.914237	3.914290	53
3.914608	3.914660	3.914713	3.914766	3.914819	53
3.915136	3.915189	3.915241	3.915294	3.915347	53
3.915664	3.915716	3.915769	3.915822	3.915875	53
3.916191	3.916243	3.916296	3.916349	3.916401	53
3.916717	3.916770	3.916822	3.916875	3.916927	53
3.917243	3.917295	3.917348	3.917400	3.917453	53
3.917768	3.917820	3.917873	3.917925	3.917978	52
3.918293	3.918345	3.918397	3.918450	3.918502	52
3.918816	3.918869	3.918921	3.918973	3.919026	52
3.919340	3.919392	3.919444	3.919496	3.919549	52
3.919862	3.919914	3.919967	3.920019	3.920071	52
3.920384	3.920436	3.920489	3.920541	3.920593	52
3.920906	3.920958	3.921010	3.921062	3.921114	52
3.921426	3.921478	3.921530	3.921582	3.921634	52
3.921946	3.921998	3.922050	3.922102	3.922154	52
3.922466	3.922518	3.922570	3.922622	3.922674	52
3.922985	3.923037	3.923089	3.923140	3.923192	52
3.923503	3.923555	3.923607	3.923658	3.923710	52
3.924021	3.924072	3.924124	3.924176	3.924228	52

N.	0.00	1.00	2.00	3.00	4.00
840	3.924279	3.924331	3.924383	3.924434	3.924486
841	3.924796	3.924848	3.924899	3.924951	3.925003
842	3.925312	3.925364	3.925415	3.925467	3.925518
843	3.925828	3.925879	3.925931	3.925982	3.926034
844	3.926342	3.926394	3.926445	3.926497	3.926548
845	3.926857	3.926908	3.926959	3.927011	3.927062
846	3.927370	3.927422	3.927473	3.927524	3.927576
847	3.927883	3.927935	3.927986	3.928037	3.928088
848	3.928396	3.928447	3.928498	3.928549	3.928601
849	3.928908	3.928959	3.929010	3.929061	3.929112
850	3.929419	3.929470	3.929521	3.929572	3.929623
851	3.929930	3.929981	3.930032	3.930083	3.930134
852	3.930440	3.930491	3.930542	3.930592	3.930643
853	3.930949	3.931000	3.931051	3.931102	3.931153
854	3.931458	3.931509	3.931560	3.931610	3.931661
855	3.931966	3.932017	3.932068	3.932118	3.932169
856	3.932474	3.932524	3.932575	3.932626	3.932677
857	3.932981	3.933031	3.933082	3.933133	3.933183
858	3.933487	3.933538	3.933589	3.933639	3.933690
859	3.933993	3.934044	3.934094	3.934145	3.934195
860	3.934498	3.934549	3.934599	3.934650	3.934700
861	3.935003	3.935054	3.935104	3.935154	3.935205
862	3.935507	3.935558	3.935608	3.935658	3.935709
863	3.936011	3.936061	3.936111	3.936162	3.936212
864	3.936514	3.936564	3.936614	3.936665	3.936715
865	3.937016	3.937066	3.937117	3.937167	3.937217
866	3.937518	3.937568	3.937618	3.937668	3.937718
867	3.938019	3.938069	3.938119	3.938169	3.938219
868	3.938520	3.938570	3.938620	3.938670	3.938720
869	3.939020	3.939070	3.939120	3.939170	3.939220
870	3.939519	3.939569	3.939619	3.939669	3.939719
871	3.940018	3.940068	3.940118	3.940168	3.940218
872	3.940516	3.940566	3.940616	3.940666	3.940716
873	3.941014	3.941064	3.941114	3.941163	3.941213
874	3.941511	3.941561	3.941611	3.941660	3.941710
875	3.942008	3.942058	3.942107	3.942157	3.942207
876	3.942504	3.942554	3.942603	3.942653	3.942702
877	3.943000	3.943049	3.943099	3.943148	3.943198
878	3.943495	3.943544	3.943593	3.943643	3.943692
879	3.943989	3.944038	3.944088	3.944137	3.944186

Common Logarithms.

45

5.00	6.00	7.00	8.00	9.00	D.
3.924538	3.924589	3.924641	3.924693	3.924744	52
3.925054	3.925106	3.925157	3.925209	3.925261	52
3.925570	3.925621	3.925673	3.925725	3.925776	52
3.926085	3.926137	3.926188	3.926240	3.926291	51
3.926600	3.926651	3.926702	3.926754	3.926805	51
3.927114	3.927165	3.927216	3.927268	3.927319	51
3.927627	3.927678	3.927730	3.927781	3.927832	51
3.928140	3.928191	3.928242	3.928293	3.928345	51
3.928652	3.928703	3.928754	3.928805	3.928857	51
3.929163	3.929215	3.929266	3.929317	3.929368	51
3.929674	3.929725	3.929776	3.929827	3.929879	51
3.930185	3.930236	3.930287	3.930338	3.930389	51
3.930694	3.930745	3.930796	3.930847	3.930898	51
3.931204	3.931254	3.931305	3.931356	3.931407	51
3.931712	3.931763	3.931814	3.931865	3.931915	51
3.932220	3.932271	3.932322	3.932372	3.932423	51
3.932727	3.932778	3.932829	3.932879	3.932930	51
3.933234	3.933285	3.933335	3.933386	3.933437	51
3.933740	3.933791	3.933841	3.933892	3.933943	51
3.934246	3.934296	3.934347	3.934397	3.934448	51
3.934751	3.934801	3.934852	3.934902	3.934953	50
3.935255	3.935306	3.935356	3.935406	3.935457	50
3.935759	3.935809	3.935860	3.935910	3.935960	50
3.936262	3.936313	3.936363	3.936413	3.936463	50
3.936765	3.936815	3.936865	3.936916	3.936966	50
3.937267	3.937317	3.937367	3.937418	3.937468	50
3.937769	3.937819	3.937869	3.937919	3.937969	50
3.938269	3.938320	3.938370	3.938420	3.938470	50
3.938770	3.938820	3.938870	3.938919	3.938970	50
3.939270	3.939320	3.939369	3.939419	3.939469	50
3.939769	3.939819	3.939869	3.939918	3.939968	50
3.940267	3.940317	3.940367	3.940417	3.940467	50
3.940765	3.940815	3.940865	3.940915	3.940964	50
3.941263	3.941313	3.941362	3.941412	3.941462	50
3.941760	3.941809	3.941859	3.941909	3.941958	50
3.942256	3.942306	3.942355	3.942405	3.942455	50
3.942752	3.942801	3.942851	3.942901	3.942950	50
3.943247	3.943297	3.943346	3.943396	3.943445	49
3.943742	3.943791	3.943841	3.943890	3.943939	49
3.944236	3.944285	3.944335	3.944384	3.944433	49

N.	0.00	1.00	2.00	3.00	4.00
880	3.944483	3.944532	3.944581	3.944631	3.944680
881	3.944976	3.945025	3.945074	3.945124	3.945173
882	3.945469	3.945518	3.945567	3.945616	3.945665
883	3.945961	3.946010	3.946059	3.946108	3.946157
884	3.946452	3.946501	3.946551	3.946600	3.946649
885	3.946943	3.946992	3.947041	3.947090	3.947140
886	3.947434	3.947483	3.947532	3.947581	3.947630
887	3.947924	3.947973	3.948022	3.948070	3.948119
888	3.948413	3.948462	3.948511	3.948560	3.948609
889	3.948902	3.948951	3.948999	3.949048	3.949097
890	3.949390	3.949439	3.949488	3.949536	3.949585
891	3.949878	3.949926	3.949975	3.950024	3.950073
892	3.950365	3.950414	3.950463	3.950511	3.950560
893	3.950851	3.950900	3.950949	3.950997	3.951046
894	3.951338	3.951386	3.951435	3.951483	3.951532
895	3.951823	3.951872	3.951920	3.951969	3.952017
896	3.952308	3.952356	3.952405	3.952453	3.952502
897	3.952792	3.952841	3.952889	3.952938	3.952986
898	3.953276	3.953325	3.953373	3.953421	3.953470
899	3.953760	3.953808	3.953856	3.953905	3.953953
900	3.954243	3.954291	3.954339	3.954387	3.954435
901	3.954725	3.954773	3.954821	3.954869	3.954918
902	3.955207	3.955255	3.955303	3.955351	3.955399
903	3.955688	3.955736	3.955784	3.955832	3.955880
904	3.956168	3.956216	3.956265	3.956313	3.956361
905	3.956640	3.956697	3.956745	3.956793	3.956840
906	3.957128	3.957176	3.957224	3.957272	3.957320
907	3.957607	3.957655	3.957703	3.957751	3.957799
908	3.958086	3.958134	3.958181	3.958229	3.958277
909	3.958564	3.958612	3.958659	3.958707	3.958755
910	3.959041	3.959089	3.959137	3.959185	3.959232
911	3.959518	3.959566	3.959614	3.959661	3.959709
912	3.959995	3.960042	3.960090	3.960138	3.960185
913	3.960471	3.960518	3.960566	3.960613	3.960661
914	3.960946	3.960994	3.961041	3.961089	3.961136
915	3.961421	3.961469	3.961516	3.961563	3.961611
916	3.961895	3.961943	3.961990	3.962038	3.962085
917	3.962369	3.962417	3.962464	3.962511	3.962559
918	3.962843	3.962890	3.962937	3.962985	3.963032
919	3.963316	3.963363	3.963410	3.963457	3.963504

Common Logarithms.

47

5.00	6.00	7.00	8.00	9.00	D.
3.944729	3.944779	3.944828	3.944877	3.944927	49
3.945222	3.945272	3.945321	3.945370	3.945419	49
3.945715	3.945764	3.945813	3.945862	3.945912	49
3.946207	3.946256	3.946305	3.946354	3.946403	49
3.946698	3.946747	3.946796	3.946845	3.946894	49
3.947189	3.947238	3.947287	3.947336	3.947385	49
3.947679	3.947728	3.947777	3.947826	3.947875	49
3.948168	3.948217	3.948266	3.948315	3.948364	49
3.948657	3.948706	3.948755	3.948804	3.948853	49
3.949146	3.949195	3.949244	3.949292	3.949341	49
3.949634	3.949683	3.949731	3.949780	3.949829	49
3.950121	3.950170	3.950219	3.950267	3.950316	49
3.950608	3.950657	3.950706	3.950754	3.950803	49
3.951095	3.951143	3.951192	3.951240	3.951289	49
3.951580	3.951628	3.951677	3.951726	3.951775	49
3.952066	3.952114	3.952163	3.952211	3.952260	49
3.952550	3.952599	3.952647	3.952696	3.952744	48
3.953034	3.953083	3.953131	3.953179	3.953228	48
3.953518	3.953566	3.953615	3.953663	3.953711	48
3.954001	3.954049	3.954098	3.954146	3.954194	48
3.954484	3.954532	3.954580	3.954628	3.954677	48
3.954960	3.955008	3.955056	3.955104	3.955152	48
3.955447	3.955495	3.955543	3.955592	3.955640	48
3.955928	3.955976	3.956024	3.956072	3.956120	48
3.956409	3.956457	3.956505	3.956553	3.956601	48
3.956888	3.956936	3.956984	3.957032	3.957080	48
3.957368	3.957416	3.957464	3.957512	3.957559	48
3.957847	3.957894	3.957942	3.957990	3.958038	48
3.958325	3.958373	3.958421	3.958468	3.958516	48
3.958803	3.958850	3.958898	3.958946	3.958994	48
3.959280	3.959328	3.959375	3.959423	3.959471	48
3.959757	3.959804	3.959852	3.959900	3.959947	48
3.960233	3.960280	3.960328	3.960376	3.960423	48
3.960709	3.960756	3.960804	3.960851	3.960899	48
3.961184	3.961231	3.961279	3.961326	3.961374	47
3.961658	3.961706	3.961753	3.961801	3.961848	47
3.962132	3.962180	3.962227	3.962275	3.962322	47
3.962606	3.962653	3.962701	3.962748	3.962795	47
3.963079	3.963126	3.963174	3.963221	3.963268	47
3.963552	3.963599	3.963646	3.963693	3.963741	47

N.	0.00	1.00	2.00	3.00	4.00
920	3.963788	3.963835	3.963882	3.963929	3.963977
921	3.964260	3.964307	3.964354	3.964401	3.964448
922	3.964731	3.964778	3.964825	3.964872	3.964919
923	3.965202	3.965249	3.965296	3.965343	3.965390
924	3.965672	3.965719	3.965766	3.965813	3.965860
925	3.966142	3.966189	3.966236	3.966283	3.966329
926	3.966611	3.966658	3.966705	3.966752	3.966799
927	3.967080	3.967127	3.967173	3.967220	3.967267
928	3.967548	3.967595	3.967642	3.967688	3.967735
929	3.968016	3.968062	3.968109	3.968156	3.968203
930	3.968483	3.968530	3.968576	3.968623	3.968669
931	3.968950	3.968996	3.969043	3.969090	3.969136
932	3.969416	3.969463	3.969509	3.969556	3.969602
933	3.969882	3.969928	3.969975	3.970021	3.970068
934	3.970347	3.970393	3.970440	3.970486	3.970533
935	3.970812	3.970858	3.970904	3.970951	3.970997
936	3.971276	3.971322	3.971369	3.971415	3.971461
937	3.971740	3.971786	3.971832	3.971879	3.971925
938	3.972203	3.972249	3.972295	3.972342	3.972388
939	3.972666	3.972712	3.972758	3.972804	3.972851
940	3.973128	3.973174	3.973220	3.973266	3.973313
941	3.973590	3.973636	3.973682	3.973728	3.973774
942	3.974051	3.974097	3.974143	3.974189	3.974235
943	3.974512	3.974558	3.974604	3.974650	3.974696
944	3.974972	3.975018	3.975064	3.975110	3.975156
945	3.975432	3.975478	3.975524	3.975570	3.975616
946	3.975891	3.975937	3.975983	3.976029	3.976075
947	3.976350	3.976396	3.976442	3.976488	3.976533
948	3.976808	3.976854	3.976900	3.976946	3.976992
949	3.977266	3.977312	3.977358	3.977403	3.977449
950	3.977724	3.977769	3.977815	3.977861	3.977906
951	3.978181	3.978226	3.978272	3.978317	3.978363
952	3.978637	3.978683	3.978728	3.978774	3.978819
953	3.979093	3.979138	3.979184	3.979230	3.979275
954	3.979548	3.979594	3.979639	3.979685	3.979730
955	3.980003	3.980049	3.980094	3.980140	3.980185
956	3.980458	3.980503	3.980549	3.980594	3.980640
957	3.980912	3.980957	3.981003	3.981048	3.981093
958	3.981366	3.981411	3.981456	3.981501	3.981547
959	3.981819	3.981864	3.981909	3.981954	3.982000

Common Logarithms.

49

5.00	6.00	7.00	8.00	9.00	D.
3.964024	3.964071	3.964118	3.964165	3.964212	47
3.964495	3.964542	3.964590	3.964637	3.964684	47
3.964966	3.965013	3.965061	3.965108	3.965155	47
3.965437	3.965484	3.965531	3.965578	3.965625	47
3.965907	3.965954	3.966001	3.966048	3.966095	47
3.966376	3.966423	3.966470	3.966517	3.966564	47
3.966845	3.966892	3.966939	3.966986	3.967033	47
3.967314	3.967361	3.967408	3.967454	3.967501	47
3.967782	3.967829	3.967875	3.967922	3.967969	47
3.968249	3.968296	3.968343	3.968390	3.968436	47
3.968716	3.968763	3.968810	3.968856	3.968903	47
3.969183	3.969229	3.969276	3.969323	3.969369	47
3.969649	3.969695	3.969742	3.969789	3.969835	47
3.970114	3.970161	3.970207	3.970254	3.970300	47
3.970579	3.970626	3.970672	3.970719	3.970765	46
3.971044	3.971090	3.971137	3.971183	3.971229	46
3.971508	3.971554	3.971601	3.971647	3.971693	46
3.971971	3.972018	3.972064	3.972110	3.972157	46
3.972434	3.972481	3.972527	3.972573	3.972619	46
3.972897	3.972943	3.972989	3.973035	3.973082	46
3.973359	3.973405	3.973451	3.973497	3.973543	46
3.973820	3.973866	3.973913	3.973959	3.974005	46
3.974281	3.974327	3.974374	3.974420	3.974466	46
3.974742	3.974788	3.974834	3.974880	3.974926	46
3.975202	3.975248	3.975294	3.975340	3.975386	46
3.975662	3.975707	3.975753	3.975799	3.975845	46
3.976121	3.976167	3.976212	3.976258	3.976304	46
3.976579	3.976625	3.976671	3.976717	3.976763	46
3.977037	3.977083	3.977129	3.977175	3.977220	46
3.977495	3.977541	3.977586	3.977632	3.977678	46
3.977952	3.977998	3.978043	3.978089	3.978135	46
3.978409	3.978454	3.978500	3.978546	3.978591	46
3.978865	3.978911	3.978956	3.979002	3.979047	46
3.979321	3.979366	3.979412	3.979457	3.979503	46
3.979776	3.979821	3.979867	3.979912	3.979958	46
3.980231	3.980276	3.980322	3.980367	3.980412	45
3.980685	3.980730	3.980776	3.980821	3.980867	45
3.981139	3.981184	3.981229	3.981275	3.981320	45
3.981592	3.981637	3.981683	3.981728	3.981773	45
3.982045	3.982090	3.982135	3.982181	3.982226	45

N.	0.00	1.00	2.00	3.00	4.00
960	3.082271	3.082316	3.082362	3.082407	3.082452
961	3.082273	3.082269	3.082314	3.082359	3.082404
962	3.0823175	3.082220	3.082265	3.082310	3.082355
964	3.0823626	3.082371	3.082379	3.0823792	3.0823897
964	3.084077	3.084122	3.084167	3.084212	3.084257
965	3.084527	3.084572	3.084617	3.084662	3.084707
966	3.084977	3.085022	3.085067	3.085112	3.085157
967	3.085426	3.085471	3.085516	3.085561	3.085606
968	3.085875	3.085920	3.085965	3.086010	3.086055
969	3.086324	3.086369	3.086413	3.086458	3.086503
970	3.086774	3.086817	3.086861	3.086906	3.086951
971	3.087219	3.087264	3.087309	3.087354	3.087399
972	3.087666	3.087711	3.087756	3.087801	3.087845
973	3.088113	3.088157	3.088202	3.088247	3.088291
974	3.088559	3.088604	3.088648	3.088693	3.088737
975	3.089005	3.089049	3.089094	3.089138	3.089183
976	3.089450	3.089494	3.089539	3.089583	3.089628
977	3.089895	3.089939	3.089983	3.090028	3.090072
978	3.090339	3.090383	3.090428	3.090472	3.090516
979	3.090783	3.090827	3.090871	3.090916	3.090960
980	3.091226	3.091270	3.091315	3.091359	3.091403
981	3.091669	3.091713	3.091758	3.091802	3.091846
982	3.092113	3.092156	3.092200	3.092244	3.092288
983	3.092554	3.092598	3.092642	3.092686	3.092730
984	3.092995	3.093039	3.093083	3.093127	3.093172
985	3.093436	3.093480	3.093524	3.093568	3.093613
986	3.093877	3.093921	3.093965	3.094009	3.094053
987	3.094317	3.094361	3.094405	3.094449	3.094493
988	3.094757	3.094801	3.094845	3.094889	3.094933
989	3.095196	3.095240	3.095284	3.095328	3.095372
990	3.095635	3.095679	3.095723	3.095767	3.095811
991	3.096074	3.096117	3.096161	3.096205	3.096249
992	3.096513	3.096555	3.096599	3.096643	3.096687
993	3.096940	3.096983	3.097027	3.097070	3.097114
994	3.097386	3.097430	3.097474	3.097517	3.097561
995	3.097823	3.097867	3.097910	3.097954	3.097998
996	3.098259	3.098303	3.098347	3.098390	3.098434
997	3.098693	3.098737	3.098781	3.098824	3.098868
998	3.099131	3.099174	3.099218	3.099261	3.099305
999	3.099565	3.099609	3.099653	3.099696	3.099740

Common Logarithms:

51

5.00	6.00	7.00	8.00	9.00	D.
3.982407	3.982543	3.982588	3.982633	3.982678	45
3.982649	3.982694	3.982740	3.982785	3.982830	45
3.983001	3.983446	3.983491	3.983536	3.983581	45
3.983852	3.983897	3.983942	3.983987	3.984032	45
3.984302	3.984347	3.984392	3.984437	3.984482	45
3.984752	3.984797	3.984842	3.984887	3.984932	45
3.985202	3.985247	3.985292	3.985337	3.985382	45
3.985651	3.985696	3.985741	3.985786	3.985830	45
3.986100	3.986144	3.986189	3.986234	3.986279	45
3.986548	3.986593	3.986637	3.986682	3.986727	45
3.986996	3.987040	3.987085	3.987130	3.987175	45
3.987443	3.987488	3.987532	3.987577	3.987622	45
3.987890	3.987934	3.987979	3.988024	3.988068	45
3.988336	3.988381	3.988425	3.988470	3.988514	45
3.988782	3.988826	3.988871	3.988916	3.988960	45
3.989227	3.989272	3.989316	3.989361	3.989405	45
3.989672	3.989717	3.989761	3.989806	3.989850	44
3.990117	3.990161	3.990206	3.990250	3.990294	44
3.990561	3.990605	3.990650	3.990694	3.990738	44
3.991004	3.991049	3.991093	3.991137	3.991182	44
3.991448	3.991492	3.991536	3.991580	3.991625	44
3.991896	3.991939	3.991979	3.992023	3.992067	44
3.992333	3.992377	3.992421	3.992465	3.992509	44
3.992774	3.992819	3.992863	3.992907	3.992951	44
3.993216	3.993260	3.993304	3.993348	3.993392	44
3.993657	3.993701	3.993745	3.993789	3.993833	44
3.994097	3.994141	3.994185	3.994229	3.994273	44
3.994537	3.994581	3.994625	3.994669	3.994713	44
3.994977	3.995021	3.995065	3.995108	3.995152	44
3.995416	3.995460	3.995504	3.995547	3.995591	44
3.995854	3.995898	3.995942	3.995986	3.996029	44
3.996293	3.996337	3.996380	3.996424	3.996468	44
3.996731	3.996774	3.996818	3.996862	3.996906	44
3.997168	3.997212	3.997255	3.997299	3.997343	44
3.997605	3.997648	3.997692	3.997736	3.997779	44
3.998041	3.998085	3.998129	3.998173	3.998216	44
3.998477	3.998521	3.998564	3.998608	3.998652	44
3.998913	3.998956	3.999000	3.999043	3.999087	44
3.999348	3.999392	3.999435	3.999479	3.999522	44
3.999783	3.999826	3.999870	3.999913	3.999957	43

52 Log. Sines, Tangents, Secants. &c.

Degrees.							179
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	12. Co-sec. 2. Co-ar.	Min.
0	0.000000	10.000000	0.000000	Infinite.	10.000000	Infinite.	60
1	6.463726	9.999999	6.463726	13.536274	10.000000	13.536274	59
2	6.764756	9.999999	6.764756	13.235244	10.000000	13.235244	58
3	6.940847	9.999999	6.940847	13.059153	10.000000	13.059153	57
4	7.065786	9.999999	7.065786	12.934214	10.000000	12.934214	56
5	7.162696	9.999999	7.162696	12.837304	10.000000	12.837304	55
6	7.241877	9.999999	7.241878	12.758122	10.000001	12.758123	54
7	7.308824	9.999999	7.308825	12.691175	10.000001	12.691176	53
8	7.366816	9.999999	7.366817	12.633183	10.000001	12.633184	52
9	7.417968	9.999999	7.417970	12.582030	10.000001	12.582032	51
10	7.463726	9.999998	7.463727	12.536273	10.000002	12.536274	50
11	7.505118	9.999998	7.505120	12.494880	10.000002	12.494882	49
12	7.542906	9.999997	7.542909	12.457091	10.000003	12.457094	48
13	7.577668	9.999997	7.577672	12.422328	10.000003	12.422332	47
14	7.609853	9.999996	7.609857	12.390143	10.000004	12.390147	46
15	7.639816	9.999996	7.639820	12.360180	10.000004	12.360184	45
16	7.667845	9.999995	7.667849	12.332151	10.000005	12.332155	44
17	7.694173	9.999995	7.694179	12.305821	10.000005	12.305827	43
18	7.718997	9.999994	7.719003	12.280997	10.000006	12.281003	42
19	7.742478	9.999993	7.742484	12.257516	10.000007	12.257522	41
20	7.764754	9.999993	7.764761	12.235239	10.000007	12.235246	40
21	7.785943	9.999992	7.785951	12.214049	10.000008	12.214057	39
22	7.806146	9.999991	7.806155	12.193845	10.000009	12.193854	38
23	7.825451	9.999990	7.825460	12.174540	10.000010	12.174549	37
24	7.843934	9.999989	7.843944	12.156056	10.000011	12.156066	36
25	7.861662	9.999989	7.861674	12.138326	10.000011	12.138338	35
26	7.878695	9.999988	7.878708	12.121292	10.000012	12.121305	34
27	7.895085	9.999987	7.895099	12.104901	10.000013	12.104915	33
28	7.910879	9.999986	7.910894	12.089106	10.000014	12.089121	32
29	7.926119	9.999985	7.926134	12.073866	10.000015	12.073881	31
30	7.940842	9.999983	7.940858	12.059142	10.000017	12.059158	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. 0. Co-ar.	Secant.	Min.
Degrees 89							
"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.
60.	28029.	56.	28029.	10.	4671.	1.	4672
50.	23357.	55.	23358	9.	4204.	1.	4204
40.	18686.	54.	18686	8.	3737.	1.	3737
30.	14014.	53.	14015	7.	3270.	1.	3270
20.	9343.	52.	9343	6.	2803.	1.	2803
	Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.
5.	2336.	1.	2336	5.	2336.	1.	2336
4.	1868.	0.	1869	4.	1868.	0.	1869
3.	1401.	0.	1401	3.	1401.	0.	1401
2.	934.	0.	934	2.	934.	0.	934
1.	467.	0.	467	1.	467.	0.	467
	Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

53

0 Degrees.							179
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	11. Co-sec.	Min.
30	7.940842	9.999983	7.940858	12.059142	10.000017	12.059158	30
31	7.955082	9.999982	7.955100	12.044900	10.000018	12.044918	29
32	7.968870	9.999981	7.968889	12.031111	10.000019	12.031130	28
33	7.982233	9.999980	7.982253	12.017747	10.000020	12.017767	27
34	7.995198	9.999979	7.995219	12.004781	10.000021	12.004802	26
35	8.007787	9.999977	8.007809	11.992191	10.000022	11.992213	25
36	8.020021	9.999976	8.020044	11.979956	10.000024	11.979979	24
37	8.031919	9.999975	8.031945	11.968055	10.000025	11.968081	23
38	8.043501	9.999973	8.043527	11.956473	10.000027	11.956499	22
39	8.054781	9.999972	8.054809	11.945191	10.000028	11.945219	21
40	8.065776	9.999971	8.065806	11.934194	10.000029	11.934224	20
41	8.076500	9.999969	8.076531	11.923469	10.000031	11.923500	19
42	8.086965	9.999968	8.086997	11.913003	10.000032	11.913035	18
43	8.097183	9.999966	8.097217	11.902783	10.000034	11.902817	17
44	8.107167	9.999964	8.107203	11.892797	10.000036	11.892833	16
45	8.116926	9.999963	8.116963	11.883037	10.000037	11.883074	15
46	8.126471	9.999961	8.126510	11.873490	10.000039	11.873529	14
47	8.135810	9.999959	8.135851	11.864149	10.000041	11.864190	13
48	8.144953	9.999958	8.144996	11.855004	10.000042	11.855047	12
49	8.153907	9.999956	8.153952	11.846048	10.000044	11.846093	11
50	8.162681	9.999954	8.162727	11.837273	10.000046	11.837319	10
51	8.171280	9.999952	8.171328	11.828672	10.000048	11.828720	9
52	8.179713	9.999950	8.179763	11.820237	10.000050	11.820287	8
53	8.187985	9.999948	8.188036	11.811964	10.000052	11.812015	7
54	8.196102	9.999945	8.196156	11.803844	10.000054	11.803898	6
55	8.204070	9.999944	8.204126	11.795874	10.000056	11.795930	5
56	8.211895	9.999942	8.211953	11.788047	10.000058	11.788105	4
57	8.219581	9.999940	8.219641	11.780359	10.000060	11.780419	3
58	8.227134	9.999938	8.227195	11.772805	10.000062	11.772866	2
59	8.234557	9.999936	8.234621	11.765379	10.000064	11.765443	1
60	8.241855	9.999934	8.241921	11.758079	10.000066	11.758145	0
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					0. Co-ar.		
Degrees 89							

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	9545.	2.	9546	10.	1591.	0.	1591	5.	795.	0.	795
50.	7954.	1.	7955	9.	1432.	0.	1432	4.	636.	0.	636
40.	6363.	1.	6364	8.	1273.	0.	1273	3.	477.	0.	477
30.	4772.	1.	4773	7.	1114.	0.	1114	2.	318.	0.	318
20.	3182.	1.	3182	6.	954.	0.	955	1.	159.	0.	159
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

Degree							178
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	11. Co-sec.	Min.
0	8.241855	9.999934	8.241921	11.758079	10.000066	11.758145	60
1	8.249033	9.999932	8.249102	11.750898	10.000068	11.750967	59
2	8.256094	9.999929	8.256165	11.743835	10.000071	11.743906	58
3	8.263042	9.999927	8.263115	11.736883	10.000073	11.736958	57
4	8.269881	9.999925	8.269956	11.730044	10.000075	11.730119	56
5	8.276614	9.999922	8.276691	11.723309	10.000078	11.723386	55
6	8.283243	9.999919	8.283322	11.716677	10.000080	11.716757	54
7	8.289775	9.999918	8.289856	11.710144	10.000082	11.710227	53
8	8.296207	9.999915	8.296292	11.703708	10.000085	11.703793	52
9	8.302646	9.999913	8.302734	11.697366	10.000087	11.697454	51
10	8.308994	9.999910	8.309084	11.691116	10.000090	11.691206	50
11	8.315254	9.999907	8.315346	11.684954	10.000093	11.685046	49
12	8.321427	9.999905	8.321522	11.678878	10.000095	11.678973	48
13	8.327516	9.999903	8.327614	11.672886	10.000098	11.672984	47
14	8.333524	9.999900	8.333625	11.666975	10.000101	11.667076	46
15	8.339453	9.999897	8.339556	11.661144	10.000103	11.661247	45
16	8.345304	9.999894	8.345408	11.655390	10.000106	11.655496	44
17	8.351078	9.999891	8.351183	11.649711	10.000109	11.649819	43
18	8.356773	9.999888	8.356880	11.644103	10.000112	11.644216	42
19	8.362391	9.999885	8.362500	11.638570	10.000115	11.638685	41
20	8.367932	9.999882	8.368043	11.633105	10.000118	11.633223	40
21	8.373397	9.999879	8.373510	11.627708	10.000121	11.627829	39
22	8.378789	9.999876	8.378904	11.622378	10.000124	11.622501	38
23	8.384108	9.999873	8.384225	11.617111	10.000127	11.617238	37
24	8.389354	9.999870	8.389473	11.611908	10.000130	11.612038	36
25	8.394527	9.999867	8.394648	11.606766	10.000133	11.606899	35
26	8.399627	9.999864	8.399750	11.601685	10.000136	11.601821	34
27	8.404654	9.999861	8.404779	11.596662	10.000139	11.596801	33
28	8.409608	9.999858	8.409735	11.591696	10.000142	11.591839	32
29	8.414489	9.999855	8.414618	11.586787	10.000146	11.586932	31
30	8.419297	9.999852	8.419428	11.581932	10.000149	11.582081	30
Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.	
				o. Co ar.			

Degrees 89

Sine.	Co-f.	Tang.	Sine.	Co-f.	Tang.	Sine.	Co-f.	Tang.
60. 5751.	3.	5754	10. 959.	0.	959	5. 479.	0.	479
50. 4793.	2.	4799	9. 863.	0.	863	4. 384.	0.	383
40. 3834.	1.	3836	8. 767.	0.	767	3. 288.	0.	288
30. 2876.	0.	2877	7. 671.	0.	671	2. 192.	0.	192
20. 1917.	0.	1918	6. 575.	0.	575	1. 96.	0.	96
Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

55

Degree							178
Min	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	11. Co-sec.	Min
30	8.417912	9.999851	8.418068	11.581932	10.000149	11.582081	30
31	8.427717	9.999848	8.427869	11.577131	10.000152	11.577283	29
32	8.437462	9.999844	8.437618	11.572382	10.000156	11.572538	28
33	8.447156	9.999841	8.447315	11.567685	10.000159	11.567844	27
34	8.456800	9.999838	8.456962	11.563037	10.000163	11.563200	26
35	8.466404	9.999834	8.466569	11.558440	10.000166	11.558606	25
36	8.475944	9.999831	8.476110	11.553899	10.000169	11.554069	24
37	8.485440	9.999827	8.485613	11.549387	10.000173	11.549650	23
38	8.494893	9.999824	8.495070	11.544939	10.000176	11.545207	22
39	8.504301	9.999820	8.504481	11.540515	10.000180	11.540799	21
40	8.513665	9.999816	8.513849	11.536115	10.000184	11.536335	20
41	8.522985	9.999813	8.523172	11.531728	10.000187	11.531915	19
42	8.532263	9.999809	8.532454	11.527356	10.000191	11.527537	18
43	8.541508	9.999805	8.541693	11.523007	10.000195	11.523185	17
44	8.550708	9.999801	8.550892	11.518681	10.000199	11.518837	16
45	8.559848	9.999797	8.559950	11.514359	10.000203	11.514515	15
46	8.568963	9.999794	8.569170	11.510039	10.000206	11.510193	14
47	8.578040	9.999790	8.578259	11.505750	10.000210	11.505906	13
48	8.587078	9.999786	8.587293	11.501493	10.000214	11.501652	12
49	8.596080	9.999782	8.596328	11.497279	10.000218	11.497440	11
50	8.605045	9.999778	8.605297	11.493013	10.000222	11.493175	10
51	8.613974	9.999774	8.614230	11.488799	10.000226	11.488963	9
52	8.622867	9.999769	8.623128	11.484639	10.000231	11.484805	8
53	8.631729	9.999765	8.631991	11.480439	10.000235	11.480607	7
54	8.640551	9.999761	8.640814	11.476219	10.000239	11.476389	6
55	8.649343	9.999757	8.649606	11.471954	10.000243	11.472127	5
56	8.658092	9.999753	8.658356	11.467751	10.000247	11.467927	4
57	8.666828	9.999748	8.667093	11.463529	10.000252	11.463707	3
58	8.675528	9.999744	8.675793	11.459323	10.000256	11.459503	2
59	8.684186	9.999740	8.684452	11.455133	10.000260	11.455315	1
60	8.692819	9.999735	8.693084	11.450959	10.000265	11.451143	0
Co-fine.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	11. Co-sec.	

Degrees 88

Sine.	Co-f.	Tang.	Sine.	Co-f.	Tang.	Sine.	Co-f.	Tang.
69. 4135.	4.	4119	10. 686.	1.	687	5. 343.	0.	343
59. 3439.	3.	3433	9. 617.	1.	618	4. 274.	0.	275
49. 2744.	3.	2746	8. 549.	1.	549	3. 206.	0.	206
39. 2058.	2.	2060	7. 480.	0.	480	2. 137.	0.	137
29. 1372.	1.	1373	6. 412.	0.	412	1. 69.	0.	69
Co-fine.	Sine.	Tang.	Co-fine.	Sine.	Tang.	Co-fine.	Sine.	Tang.

2 Degrees

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	11. Co-sec. 1. Co-ar.	Min.
0	8.542819	9.999735	8.543084	11.456916	10.000265	11.457181	60
1	8.546422	9.999731	8.546691	11.453309	10.000269	11.453578	59
2	8.549995	9.999726	8.550268	11.449732	10.000274	11.450005	58
3	8.553539	9.999722	8.553817	11.446183	10.000278	11.446461	57
4	8.557054	9.999717	8.557336	11.442664	10.000283	11.442946	56
5	8.560540	9.999713	8.560828	11.439172	10.000287	11.439460	55
6	8.563999	9.999708	8.564291	11.435709	10.000292	11.436001	54
7	8.567431	9.999704	8.567727	11.432273	10.000296	11.432569	53
8	8.570836	9.999699	8.571137	11.428863	10.000301	11.429164	52
9	8.574214	9.999694	8.574520	11.425480	10.000306	11.425786	51
10	8.577566	9.999689	8.577877	11.422123	10.000311	11.422434	50
11	8.580892	9.999685	8.581208	11.418792	10.000315	11.419108	49
12	8.584193	9.999680	8.584514	11.415486	10.000320	11.415807	48
13	8.587469	9.999675	8.587795	11.412205	10.000325	11.412531	47
14	8.590721	9.999670	8.591051	11.408949	10.000330	11.409279	46
15	8.593948	9.999665	8.594283	11.405717	10.000335	11.406052	45
16	8.597152	9.999660	8.597492	11.402508	10.000340	11.402848	44
17	8.600332	9.999655	8.600677	11.399323	10.000345	11.399668	43
18	8.603489	9.999650	8.603839	11.396161	10.000350	11.396511	42
19	8.606623	9.999645	8.606978	11.393022	10.000355	11.393377	41
20	8.609734	9.999640	8.610094	11.389906	10.000360	11.390266	40
21	8.612823	9.999635	8.613189	11.386811	10.000365	11.387177	39
22	8.615891	9.999629	8.616262	11.383738	10.000371	11.384109	38
23	8.618937	9.999624	8.619313	11.380687	10.000376	11.381063	37
24	8.621962	9.999619	8.622343	11.377657	10.000381	11.378038	36
25	8.624965	9.999614	8.625352	11.374648	10.000386	11.375035	35
26	8.627948	9.999608	8.628340	11.371660	10.000392	11.372052	34
27	8.630911	9.999603	8.631308	11.368692	10.000397	11.369089	33
28	8.633854	9.999597	8.634256	11.365744	10.000403	11.366146	32
29	8.636776	9.999592	8.637184	11.362816	10.000408	11.363224	31
30	8.639680	9.999586	8.640093	11.359906	10.000414	11.360320	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. 0. Co-ar.	Secant.	Min.

92

Degrees 87

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	3203.	5.	3209	10.	534.	1.	535	5.	267.	0.	267
50.	2670.	4.	2674	9.	481.	1.	482	4.	214.	0.	214
40.	2136.	3.	2135	8.	427.	1.	428	3.	160.	0.	160
30.	1602.	2.	1604	7.	373.	1.	374	2.	107.	0.	107
20.	1068.	2.	1070	6.	320.	0.	321	1.	53.	0.	53
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

57

2 Degrees							77
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	1. Co-sec.	Min.
30	8.639680	9.999586	8.640093	11.359907	10.000414	11.360320	30
31	8.642563	9.999581	8.642082	11.357018	10.000419	11.357437	29
32	8.645428	9.999575	8.645853	11.354147	10.000425	11.354572	28
33	8.648274	9.999570	8.648704	11.351295	10.000430	11.351726	27
34	8.651102	9.999564	8.651537	11.348463	10.000436	11.348898	26
35	8.653911	9.999558	8.654352	11.345648	10.000442	11.346089	25
36	8.656702	9.999553	8.657149	11.342851	10.000447	11.343298	24
37	8.659475	9.999547	8.659928	11.340072	10.000453	11.340525	23
38	8.662230	9.999541	8.662689	11.337311	10.000459	11.337770	22
39	8.664968	9.999535	8.665433	11.334567	10.000465	11.335032	21
40	8.667689	9.999529	8.668160	11.331840	10.000471	11.332311	20
41	8.670393	9.999524	8.670870	11.329130	10.000476	11.329607	19
42	8.673080	9.999518	8.673563	11.326437	10.000482	11.326920	18
43	8.675751	9.999512	8.676239	11.323761	10.000488	11.324249	17
44	8.678405	9.999506	8.678900	11.321100	10.000494	11.321595	16
45	8.681043	9.999500	8.681544	11.318456	10.000500	11.318957	15
46	8.683665	9.999493	8.684172	11.315828	10.000507	11.316335	14
47	8.686272	9.999487	8.686784	11.313216	10.000513	11.313728	13
48	8.688863	9.999481	8.689381	11.310619	10.000519	11.311137	12
49	8.691438	9.999475	8.691963	11.308037	10.000525	11.308562	11
50	8.693998	9.999469	8.694529	11.305471	10.000531	11.306002	10
51	8.696543	9.999463	8.697081	11.302919	10.000537	11.303457	9
52	8.699073	9.999456	8.699617	11.300383	10.000544	11.300927	8
53	8.701589	9.999450	8.702139	11.297861	10.000550	11.298411	7
54	8.704090	9.999443	8.704646	11.295354	10.000557	11.295910	6
55	8.706577	9.999437	8.707140	11.292860	10.000563	11.293423	5
56	8.709049	9.999431	8.709618	11.290382	10.000569	11.290951	4
57	8.711507	9.999424	8.712083	11.287917	10.000576	11.288493	3
58	8.713952	9.999418	8.714534	11.285466	10.000582	11.286048	2
59	8.716383	9.999411	8.716972	11.283028	10.000589	11.283617	1
60	8.718800	9.999404	8.719396	11.280604	10.000596	11.281200	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					0. Co-ar.		

Degrees 87											
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	2622.	6.	2628	10.	437.	1.	438	5.	219.	1.	219
50.	2185.	5.	2190	9.	393.	1.	394	4.	175.	0.	175
40.	1748.	4.	1752	8.	350.	1.	350	3.	131.	0.	131
30.	1311.	3.	1314	7.	306.	1.	306	2.	88.	0.	88
20.	874.	2.	876	6.	262.	1.	263	1.	44.	0.	44
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

3 Degrees								176
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	11. Co-sec. 1. Co-ar.	Min.	
0	8.718800	9.999404	8.719396	11.280604	10.000596	11.281200	60	
1	8.721204	9.999398	8.721806	11.278194	10.000802	11.278796	59	
2	8.723595	9.999391	8.724204	11.275796	10.000609	11.276405	58	
3	8.725972	9.999384	8.726588	11.273412	10.000616	11.274028	57	
4	8.728337	9.999378	8.728959	11.271041	10.000622	11.271663	56	
5	8.730688	9.999371	8.731317	11.268683	10.000629	11.269312	55	
6	8.733027	9.999364	8.733663	11.266337	10.000636	11.266973	54	
7	8.735354	9.999357	8.735996	11.264004	10.000643	11.264646	53	
8	8.737667	9.999350	8.738317	11.261683	10.000650	11.262333	52	
9	8.739969	9.999343	8.740626	11.259374	10.000657	11.260031	51	
10	8.742259	9.999336	8.742922	11.257078	10.000664	11.257741	50	
11	8.744536	9.999329	8.745207	11.254793	10.000671	11.255464	49	
12	8.746802	9.999322	8.747479	11.252521	10.000678	11.253198	48	
13	8.749055	9.999315	8.749740	11.250260	10.000685	11.250945	47	
14	8.751297	9.999308	8.751989	11.248011	10.000692	11.248703	46	
15	8.753528	9.999301	8.754227	11.245773	10.000699	11.246472	45	
16	8.755747	9.999294	8.756453	11.243547	10.000706	11.244253	44	
17	8.757955	9.999287	8.758668	11.241332	10.000713	11.242045	43	
18	8.760151	9.999279	8.760872	11.239128	10.000721	11.239849	42	
19	8.762337	9.999272	8.763065	11.236935	10.000728	11.237663	41	
20	8.764511	9.999265	8.765246	11.234754	10.000735	11.235489	40	
21	8.766675	9.999257	8.767417	11.232583	10.000743	11.233325	39	
22	8.768828	9.999250	8.769578	11.230422	10.000750	11.231172	38	
23	8.770970	9.999242	8.771727	11.228273	10.000758	11.229030	37	
24	8.773101	9.999235	8.773866	11.226134	10.000765	11.226899	36	
25	8.775223	9.999227	8.775995	11.224005	10.000773	11.224777	35	
26	8.777333	9.999220	8.778114	11.221886	10.000780	11.222667	34	
27	8.779434	9.999212	8.780222	11.219778	10.000788	11.220566	33	
28	8.781524	9.999205	8.782320	11.217680	10.000795	11.218476	32	
29	8.783605	9.999197	8.784408	11.215592	10.000803	11.216395	31	
30	8.785675	9.999189	8.786486	11.213514	10.000811	11.214325	30	
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.	

Degrees 86

	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	2219.	7.	2226	10.	370.	1.	371	5.	185.	1.	186
50.	1849.	6.	1855	9.	332.	1.	334	4.	148.	1.	148
40.	1479.	5.	1484	8.	295.	1.	297	3.	111.	0.	111
30.	1110.	4.	1113	7.	259.	1.	260	2.	74.	0.	74
20.	740.	3.	742	6.	222.	1.	223	1.	37.	0.	37
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines; Tangents, Secants, &c.

59

3 Degrees.								176
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	ii. Co-sec. i. Co-ar.	Min.	
30	8.785675	9.999189	8.786486	11.213514	10.000811	11.214325	30	
31	8.787736	9.999181	8.788554	11.211446	10.000819	11.212264	29	
32	8.789787	9.999174	8.790613	11.209387	10.000826	11.210213	28	
33	8.791828	9.999166	8.792662	11.207338	10.000834	11.208172	27	
34	8.793859	9.999158	8.794701	11.205299	10.000842	11.206141	26	
35	8.795881	9.999150	8.796731	11.203269	10.000850	11.204119	25	
36	8.797894	9.999142	8.798752	11.201248	10.000858	11.202106	24	
37	8.799897	9.999134	8.800763	11.199237	10.000866	11.200103	23	
38	8.801892	9.999126	8.802765	11.197235	10.000874	11.198109	22	
39	8.803876	9.999118	8.804758	11.195242	10.000882	11.196124	21	
40	8.805852	9.999110	8.806742	11.193258	10.000890	11.194148	20	
41	8.807819	9.999102	8.808717	11.191283	10.000898	11.192181	19	
42	8.809777	9.999094	8.810683	11.189317	10.000906	11.190223	18	
43	8.811726	9.999086	8.812641	11.187359	10.000914	11.188274	17	
44	8.813667	9.999077	8.814589	11.185411	10.000923	11.186333	16	
45	8.815599	9.999069	8.816529	11.183471	10.000931	11.184401	15	
46	8.817522	9.999061	8.818461	11.181539	10.000939	11.182478	14	
47	8.819436	9.999053	8.820384	11.179616	10.000947	11.180564	13	
48	8.821343	9.999044	8.822298	11.177702	10.000956	11.178657	12	
49	8.823240	9.999036	8.824205	11.175795	10.000964	11.176760	11	
50	8.825130	9.999027	8.826103	11.173897	10.000973	11.174870	10	
51	8.827011	9.999019	8.827992	11.172008	10.000981	11.172989	9	
52	8.828884	9.999010	8.829874	11.170126	10.000990	11.171116	8	
53	8.830749	9.999002	8.831748	11.168252	10.000998	11.169251	7	
54	8.832607	9.998993	8.833613	11.166387	10.001007	11.167393	6	
55	8.834456	9.998984	8.835471	11.164529	10.001016	11.165544	5	
56	8.836297	9.998976	8.837321	11.162679	10.001024	11.163703	4	
57	8.838130	9.998967	8.839163	11.160837	10.001033	11.161870	3	
58	8.839956	9.998958	8.840998	11.159002	10.001042	11.160044	2	
59	8.841774	9.998950	8.842824	11.157175	10.001050	11.158226	1	
60	8.843585	9.998941	8.844644	11.155356	10.001059	11.156415	0	
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	io. Co-sec. o. Co-ar.	Secant.	Min.	
93								

Degrees 86

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	1923.	8.	1931	10.	321.	1.	322	5.	160.	1.	161
50.	1603.	7.	1610	9.	288.	1.	290	4.	128.	1.	129
40.	1282.	5.	1288	8.	256.	1.	258	3.	96.	0.	97
30.	962.	4.	966	7.	224.	1.	225	2.	64.	0.	64
20.	641.	3.	644	6.	192.	1.	193	1.	32.	0.	32
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

4 Degrees.							175
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	11. Co-sec. 1. Co-ar.	Min.
0	8.843585	9.998941	8.844644	11.155356	10.001059	11.156415	60
1	8.845387	9.998932	8.846455	11.153545	10.001068	11.154613	59
2	8.847183	9.998923	8.848260	11.151740	10.001077	11.152817	58
3	8.848971	9.998914	8.850057	11.149943	10.001086	11.151029	57
4	8.850751	9.998905	8.851846	11.148154	10.001095	11.149249	56
5	8.852525	9.998896	8.853628	11.146372	10.001104	11.147475	55
6	8.854291	9.998887	8.855403	11.144597	10.001113	11.145709	54
7	8.856049	9.998878	8.857171	11.142829	10.001122	11.143951	53
8	8.857801	9.998869	8.858932	11.141068	10.001131	11.142199	52
9	8.859546	9.998860	8.860686	11.139314	10.001140	11.140454	51
10	8.861283	9.998851	8.862433	11.137567	10.001149	11.138717	50
11	8.863014	9.998841	8.864173	11.135827	10.001159	11.136986	49
12	8.864738	9.998832	8.865906	11.134094	10.001168	11.135262	48
13	8.866455	9.998823	8.867632	11.132368	10.001177	11.133545	47
14	8.868165	9.998813	8.869351	11.130649	10.001187	11.131835	46
15	8.869868	9.998804	8.871064	11.128936	10.001196	11.130132	45
16	8.871565	9.998795	8.872770	11.127230	10.001205	11.128435	44
17	8.873255	9.998785	8.874469	11.125531	10.001215	11.126745	43
18	8.874938	9.998776	8.876162	11.123838	10.001224	11.125062	42
19	8.876615	9.998766	8.877849	11.122151	10.001234	11.123385	41
20	8.878285	9.998757	8.879529	11.120471	10.001243	11.121715	40
21	8.879949	9.998747	8.881202	11.118798	10.001253	11.120051	39
22	8.881607	9.998738	8.882869	11.117131	10.001262	11.118393	38
23	8.883258	9.998728	8.884530	11.115470	10.001272	11.116742	37
24	8.884903	9.998718	8.886185	11.113815	10.001282	11.115097	36
25	8.886542	9.998708	8.887833	11.112167	10.001292	11.113458	35
26	8.888174	9.998699	8.889476	11.110524	10.001301	11.111826	34
27	8.889801	9.998689	8.891112	11.108888	10.001311	11.110199	33
28	8.891421	9.998679	8.892742	11.107258	10.001321	11.108579	32
29	8.893035	9.998669	8.894366	11.105634	10.001331	11.106965	31
30	8.894643	9.998659	8.895984	11.104016	10.001341	11.105357	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. 0. Co-ar.	Secant.	Min.
94							85

"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tan.
60.	1696.	9.	1786	10.	283.	2.	284	3.	141.	1.	142
50.	1414.	8.	1422	9.	255.	1.	256	4.	113.	1.	114
40.	1131.	6.	1137	8.	226.	1.	227	3.	85.	1.	85
30.	848.	5.	853	7.	198.	1.	199	2.	57.	0.	57
20.	566.	3.	569	6.	170.	1.	171	1.	28.	0.	28
	Co-si.	Sine.	Tang.		Co-si.	Sine.	Tang.		Co-si.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

61

4 Degrees							175				
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	11. Co-sec. 1. Co-ar.	Min.				
30	8.894643	9.998659	8.895984	11.104016	10.001341	11.105357	30				
31	8.896240	9.998649	8.897596	11.102404	10.001351	11.103754	29				
32	8.897842	9.998639	8.899203	11.100797	10.001361	11.102158	28				
33	8.899432	9.998629	8.900803	11.099197	10.001371	11.100568	27				
34	8.901017	9.998619	8.902398	11.097602	10.001381	11.098983	26				
35	8.902596	9.998609	8.903987	11.096013	10.001391	11.097404	25				
36	8.904169	9.998599	8.905570	11.094430	10.001401	11.095831	24				
37	8.905736	9.998589	8.907147	11.092853	10.001411	11.094264	23				
38	8.907297	9.998578	8.908719	11.091281	10.001422	11.092703	22				
39	8.908853	9.998568	8.910285	11.089715	10.001432	11.091147	21				
40	8.910404	9.998558	8.911846	11.088154	10.001442	11.089596	20				
41	8.911949	9.998548	8.913401	11.086599	10.001452	11.088051	19				
42	8.913488	9.998537	8.914951	11.085049	10.001463	11.086512	18				
43	8.915022	9.998527	8.916495	11.083505	10.001473	11.084978	17				
44	8.916550	9.998516	8.918034	11.081966	10.001484	11.083450	16				
45	8.918073	9.998506	8.919568	11.080432	10.001494	11.081927	15				
46	8.919591	9.998495	8.921096	11.078904	10.001505	11.080409	14				
47	8.921103	9.998485	8.922619	11.077381	10.001515	11.078897	13				
48	8.922610	9.998474	8.924136	11.075864	10.001526	11.077390	12				
49	8.924112	9.998464	8.925649	11.074351	10.001536	11.075888	11				
50	8.925609	9.998453	8.927156	11.072844	10.001547	11.074391	10				
51	8.927100	9.998442	8.928658	11.071342	10.001558	11.072900	9				
52	8.928587	9.998431	8.930155	11.069845	10.001569	11.071413	8				
53	8.930068	9.998421	8.931647	11.068353	10.001579	11.069932	7				
54	8.931544	9.998410	8.933134	11.066866	10.001590	11.068456	6				
55	8.933015	9.998399	8.934616	11.065384	10.001601	11.066983	5				
56	8.934481	9.998388	8.936093	11.063907	10.001612	11.065519	4				
57	8.935942	9.998377	8.937565	11.062435	10.001623	11.064058	3				
58	8.937398	9.998366	8.939032	11.060968	10.001634	11.062602	2				
59	8.938850	9.998355	8.940494	11.059506	10.001645	11.061150	1				
60	8.940296	9.998344	8.941952	11.058048	10.001656	11.059704	0				
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. 0. Co-ar.	Secant.	Min.				
91							Degrees 85				
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	1518.	11.	1528	10.	253.	2.	255	5.	126.	11.	127
50.	1265.	9.	1274	9.	227.	2.	229	4.	101.	11.	102
40.	1012.	5.	1019	8.	202.	1.	204	3.	76.	1.	76
30.	759.	5.	764	7.	177.	1.	178	2.	51.	0.	51
20.	506.	3.	509	6.	152.	1.	153	1.	25.	0.	25
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

5 Degrees							174
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	11. Co-sec. 1. Co-ar.	Min.
0	8.940296	9.998344	8.941952	11.058048	10.001656	11.059704	60
1	8.941738	9.998333	8.943404	11.056596	10.001667	11.058262	59
2	8.943174	9.998322	8.944852	11.055148	10.001678	11.056826	58
3	8.944606	9.998311	8.946295	11.053705	10.001689	11.055394	57
4	8.946034	9.998300	8.947734	11.052266	10.001700	11.053966	56
5	8.947456	9.998289	8.949168	11.050832	10.001711	11.052544	55
6	8.948874	9.998277	8.950597	11.049403	10.001723	11.051126	54
7	8.950287	9.998266	8.952021	11.047979	10.001734	11.049713	53
8	8.951696	9.998255	8.953441	11.046559	10.001745	11.048304	52
9	8.953100	9.998243	8.954856	11.045144	10.001757	11.046900	51
10	8.954499	9.998232	8.956267	11.043733	10.001768	11.045501	50
11	8.955894	9.998220	8.957674	11.042326	10.001780	11.044106	49
12	8.957284	9.998209	8.959075	11.040925	10.001791	11.042716	48
13	8.958670	9.998197	8.960473	11.039527	10.001803	11.041330	47
14	8.960052	9.998186	8.961866	11.038134	10.001814	11.039948	46
15	8.961429	9.998174	8.963255	11.036745	10.001826	11.038571	45
16	8.962801	9.998163	8.964639	11.035361	10.001837	11.037199	44
17	8.964170	9.998151	8.966019	11.033981	10.001849	11.035830	43
18	8.965534	9.998139	8.967394	11.032606	10.001861	11.034466	42
19	8.966893	9.998128	8.968766	11.031234	10.001872	11.033107	41
20	8.968249	9.998116	8.970133	11.029867	10.001884	11.031751	40
21	8.969600	9.998104	8.971496	11.028504	10.001896	11.030400	39
22	8.970947	9.998092	8.972855	11.027145	10.001908	11.029053	38
23	8.972289	9.998080	8.974209	11.025791	10.001920	11.027711	37
24	8.973628	9.998068	8.975560	11.024440	10.001932	11.026372	36
25	8.974962	9.998056	8.976906	11.023094	10.001944	11.025038	35
26	8.976293	9.998044	8.978248	11.021752	10.001956	11.023707	34
27	8.977619	9.998032	8.979586	11.020414	10.001968	11.022381	33
28	8.978941	9.998020	8.980921	11.019079	10.001980	11.021059	32
29	8.980259	9.998008	8.982251	11.017749	10.001992	11.019741	31
30	8.981573	9.997996	8.983577	11.016423	10.002004	11.018427	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
							Degrees 84
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	1373.	12.	1384	10.	229.	2.	231
50.	1144.	10.	1154	9.	206.	2.	208
40.	915.	8.	923	8.	183.	2.	185
30.	686.	6.	692	7.	160.	1.	161
20.	458.	4.	461	6.	137.	1.	138
Co-fi. Sine. Tang.				Co-fi. Sine. Tang.			
5.	114.	1.	115	5.	114.	1.	115
4.	92.	1.	92	4.	92.	1.	92
3.	69.	1.	69	3.	69.	1.	69
2.	46.	0.	46	2.	46.	0.	46
1.	23.	0.	23	1.	23.	0.	23
Co-fi. Sine. Tang.				Co-fi. Sine. Tang.			

Log. Sines, Tangents, Secants, &c.

63

5 Degrees.

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	11. Co-sec. 1. Co-ar.	Min.
30	8.981573	9.997996	8.983577	11.016423	10.002004	11.018427	30
31	8.982883	9.997984	8.984899	11.015101	10.002016	11.017117	29
32	8.984189	9.997972	8.986217	11.013783	10.002028	11.015811	28
33	8.985491	9.997959	8.987532	11.012468	10.002041	11.014509	27
34	8.986789	9.997947	8.988842	11.011158	10.002053	11.013211	26
35	8.988083	9.997935	8.990149	11.009851	10.002065	11.011917	25
36	8.989374	9.997922	8.991451	11.008549	10.002078	11.010626	24
37	8.990660	9.997910	8.992750	11.007250	10.002090	11.009340	23
38	8.991943	9.997897	8.994045	11.005955	10.002103	11.008057	22
39	8.993222	9.997885	8.995337	11.004663	10.002115	11.006778	21
40	8.994497	9.997872	8.996624	11.003376	10.002128	11.005503	20
41	8.995768	9.997860	8.997908	11.002092	10.002140	11.004232	19
42	8.997036	9.997847	8.999188	11.000812	10.002153	11.002964	18
43	8.998299	9.997835	9.000465	10.999535	10.002165	11.001701	17
44	8.999560	9.997822	9.001738	10.998262	10.002178	11.000440	16
45	9.000816	9.997809	9.003007	10.996993	10.002191	10.999184	15
46	9.002069	9.997797	9.004272	10.995728	10.002203	10.997931	14
47	9.003318	9.997784	9.005534	10.994466	10.002216	10.996682	13
48	9.004563	9.997771	9.006792	10.993208	10.002229	10.995437	12
49	9.005805	9.997758	9.008047	10.991953	10.002242	10.994195	11
50	9.007044	9.997745	9.009298	10.990702	10.002255	10.992956	10
51	9.008278	9.997732	9.010546	10.989454	10.002268	10.991722	9
52	9.009510	9.997719	9.011790	10.988210	10.002281	10.990490	8
53	9.010737	9.997706	9.013031	10.986969	10.002294	10.989263	7
54	9.011962	9.997693	9.014268	10.985732	10.002307	10.988038	6
55	9.013182	9.997680	9.015502	10.984498	10.002320	10.986818	5
56	9.014400	9.997667	9.016732	10.983268	10.002333	10.985600	4
57	9.015613	9.997654	9.017959	10.982041	10.002346	10.984387	3
58	9.016824	9.997641	9.019183	10.980817	10.002359	10.983176	2
59	9.018031	9.997628	9.020403	10.979597	10.002372	10.981969	1
60	9.019235	9.997614	9.021620	10.978380	10.002386	10.980765	0

Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
------	----------	-------	----------	----------	--------------------------	---------	------

93 Degrees 84

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	1253.	13.	1266	10.	209.	2.	211	5.	104.	1.	105
50.	1044.	11.	1055	9.	188.	2.	190	4.	84.	1.	84
40.	835.	8.	844	8.	167.	2.	169	3.	63.	1.	63
30.	626.	6.	633	7.	146.	2.	147	2.	42.	0.	42
20.	418.	4.	424	6.	125.	1.	126	1.	21.	0.	21
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

6 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.
0	9.019235	9.997614	9.021620	10.978380	10.002386	10.980765		60
1	9.020435	9.997601	9.022834	10.977166	10.002399	10.979565		59
2	9.021632	9.997588	9.024044	10.975956	10.002412	10.978368		58
3	9.022825	9.997574	9.025251	10.974749	10.002426	10.977175		57
4	9.024016	9.997561	9.026455	10.973545	10.002439	10.975984		56
5	9.025203	9.997547	9.027655	10.972345	10.002453	10.974797		55
6	9.026386	9.997534	9.028852	10.971148	10.002466	10.973614		54
7	9.027567	9.997520	9.030046	10.969954	10.002480	10.972433		53
8	9.028744	9.997507	9.031237	10.968763	10.002493	10.971256		52
9	9.029918	9.997493	9.032425	10.967575	10.002507	10.970082		51
10	9.031089	9.997480	9.033609	10.966391	10.002520	10.968911		50
11	9.032257	9.997466	9.034791	10.965209	10.002534	10.967743		49
12	9.033421	9.997452	9.035969	10.964031	10.002548	10.966579		48
13	9.034582	9.997439	9.037144	10.962856	10.002561	10.965418		47
14	9.035741	9.997425	9.038316	10.961684	10.002575	10.964259		46
15	9.036896	9.997411	9.039485	10.960515	10.002589	10.963104		45
16	9.038048	9.997397	9.040651	10.959349	10.002603	10.961952		44
17	9.039197	9.997383	9.041813	10.958187	10.002617	10.960803		43
18	9.040342	9.997369	9.042973	10.957027	10.002631	10.959658		42
19	9.041485	9.997355	9.044130	10.955870	10.002645	10.958515		41
20	9.042625	9.997341	9.045284	10.954716	10.002659	10.957375		40
21	9.043762	9.997327	9.046434	10.953566	10.002673	10.956238		39
22	9.044895	9.997313	9.047582	10.952418	10.002687	10.955105		38
23	9.046026	9.997299	9.048727	10.951273	10.002701	10.953974		37
24	9.047154	9.997285	9.049869	10.950131	10.002715	10.952846		36
25	9.048279	9.997271	9.051008	10.948992	10.002729	10.951721		35
26	9.049400	9.997257	9.052144	10.947856	10.002743	10.950600		34
27	9.050519	9.997242	9.053277	10.946723	10.002758	10.949481		33
28	9.051635	9.997228	9.054407	10.945593	10.002772	10.948365		32
29	9.052749	9.997214	9.055535	10.944465	10.002786	10.947251		31
30	9.053859	9.997199	9.056659	10.943340	10.002801	10.946141		30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	o. Co-ar.	Min.

96 Degrees

Degrees 83

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	1152.	14.	1166	10.	192.	2.	198	5.	96.	1.	99
50.	960.	12.	988	9.	173.	2.	178	4.	77.	1.	79
40.	768.	9.	791	8.	154.	2.	158	3.	58.	1.	58
30.	576.	7.	583	7.	134.	2.	138	2.	38.	1.	39
20.	384.	5.	395	6.	115.	1.	117	1.	19.	0.	20
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

65

6 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.053859	9.997199	9.056659	10.943341	10.002801	10.946141	30
31	9.054066	9.997185	9.057781	10.942219	10.002815	10.945034	29
32	9.056071	9.997170	9.058900	10.941100	10.002830	10.943929	28
33	9.057172	9.997156	9.060016	10.939984	10.002844	10.942828	27
34	9.058271	9.997141	9.061130	10.938870	10.002859	10.941729	26
35	9.059367	9.997127	9.062240	10.937760	10.002873	10.940633	25
36	9.060460	9.997112	9.063348	10.936652	10.002888	10.939540	24
37	9.061551	9.997098	9.064453	10.935547	10.002902	10.938449	23
38	9.062639	9.997083	9.065556	10.934444	10.002917	10.937361	22
39	9.063723	9.997068	9.066655	10.933345	10.002932	10.936276	21
40	9.064806	9.997053	9.067752	10.932248	10.002947	10.935194	20
41	9.065885	9.997039	9.068846	10.931154	10.002961	10.934115	19
42	9.066962	9.997024	9.069938	10.930062	10.002976	10.933038	18
43	9.068036	9.997009	9.071027	10.928973	10.002991	10.931964	17
44	9.069107	9.996994	9.072113	10.927887	10.003006	10.930893	16
45	9.070176	9.996979	9.073197	10.926803	10.003021	10.929824	15
46	9.071242	9.996964	9.074278	10.925722	10.003036	10.928758	14
47	9.072306	9.996949	9.075356	10.924644	10.003051	10.927694	13
48	9.073366	9.996934	9.076432	10.923568	10.003066	10.926634	12
49	9.074424	9.996919	9.077505	10.922495	10.003081	10.925576	11
50	9.075480	9.996904	9.078576	10.921424	10.003096	10.924520	10
51	9.076533	9.996889	9.079644	10.920356	10.003111	10.923467	9
52	9.077583	9.996874	9.080710	10.919290	10.003126	10.922417	8
53	9.078631	9.996858	9.081773	10.918227	10.003142	10.921369	7
54	9.079676	9.996843	9.082833	10.917167	10.003157	10.920324	6
55	9.080719	9.996828	9.083891	10.916109	10.003172	10.919281	5
56	9.081759	9.996812	9.084947	10.915053	10.003188	10.918241	4
57	9.082797	9.996797	9.086000	10.914000	10.003203	10.917203	3
58	9.083832	9.996782	9.087050	10.912950	10.003218	10.916168	2
59	9.084864	9.996766	9.088098	10.911902	10.003234	10.915136	1
60	9.085894	9.996751	9.089144	10.910856	10.003249	10.914106	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

Degrees 83

"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.
60.	1066.	15.	1081	10.	178.	2.	180	5.	89.	1.	90
50.	888.	12.	901	9.	160.	2.	162	4.	71.	1.	72
40.	711.	10.	721	8.	142.	2.	144	3.	53.	1.	54
30.	533.	7.	540	7.	124.	2.	126	2.	36.	1.	36
20.	355.	5.	360	6.	107.	1.	108	1.	18.	0.	18
	Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.

7 Degrees.

172

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.085894	9.996751	9.089144	10.910856	10.003249	10.914106	60
1	9.086922	9.996735	9.090187	10.909813	10.003265	10.913078	59
2	9.087947	9.996720	9.091228	10.908772	10.003280	10.912053	58
3	9.088970	9.996704	9.092266	10.907734	10.003296	10.911030	57
4	9.089990	9.996688	9.093302	10.906698	10.003312	10.910010	56
5	9.091008	9.996673	9.094336	10.905664	10.003327	10.908992	55
6	9.092024	9.996657	9.095367	10.904633	10.003343	10.907976	54
7	9.093037	9.996641	9.096395	10.903605	10.003359	10.906963	53
8	9.094047	9.996625	9.097422	10.902578	10.003375	10.905953	52
9	9.095056	9.996610	9.098446	10.901554	10.003390	10.904944	51
10	9.096062	9.996594	9.099468	10.900532	10.003406	10.903938	50
11	9.097065	9.996578	9.100487	10.899513	10.003422	10.902935	49
12	9.098066	9.996562	9.101504	10.898496	10.003438	10.901934	48
13	9.099065	9.996546	9.102519	10.897481	10.003454	10.900935	47
14	9.100062	9.996530	9.103532	10.896468	10.003470	10.899938	46
15	9.101056	9.996514	9.104542	10.895458	10.003486	10.898944	45
16	9.102048	9.996498	9.105550	10.894450	13.003502	10.897952	44
17	9.103037	9.996482	9.106556	10.893444	10.003518	10.896963	43
18	9.104025	9.996465	9.107559	10.892441	10.003535	10.895975	42
19	9.105010	9.996449	9.108560	10.891440	10.003551	10.894990	41
20	9.105992	9.996433	9.109559	10.890441	10.003567	10.894008	40
21	9.106973	9.996417	9.110556	10.889444	10.003583	10.893027	39
22	9.107951	9.996400	9.111551	10.888449	10.003600	10.892049	38
23	9.108927	9.996384	9.112543	10.887457	10.003616	10.891073	37
24	9.109901	9.996368	9.113533	10.886467	10.003632	10.890099	36
25	9.110873	9.996351	9.114521	10.885479	10.003649	10.889127	35
26	9.111842	9.996335	9.115507	10.884493	10.003665	10.888158	34
27	9.112809	9.996318	9.116491	10.883509	10.003682	10.887191	33
28	9.113774	9.996302	9.117472	10.882528	10.003698	10.886226	32
29	9.114737	9.996285	9.118452	10.881548	10.003715	10.885263	31
30	9.115698	9.996269	9.119429	10.880571	10.003731	10.884302	30
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

97

Degrees 82

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	992.	16.	1008	10.	165.	3.	168	5.	83.	1.	84
50.	827.	13.	840	9.	149.	2.	151	4.	66.	1.	67
40.	661.	11.	672	8.	132.	2.	134	3.	50.	1.	50
30.	496.	8.	504	7.	116.	2.	118	2.	33.	1.	34
20.	331.	5.	336	6.	99.	2.	101	1.	17.	0.	17
Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

67

7 Degrees.							
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.115698	9.996269	9.119429	10.880571	10.003731	10.884302	30
31	9.116656	9.996252	9.120404	10.879596	10.003748	10.883344	29
32	9.117613	9.996235	9.121377	10.878623	10.003765	10.882387	28
33	9.118567	9.996219	9.122348	10.877652	10.003781	10.881433	27
34	9.119519	9.996202	9.123317	10.876683	10.003798	10.880481	26
35	9.120469	9.996185	9.124284	10.875716	10.003815	10.879531	25
36	9.121417	9.996168	9.125249	10.874751	10.003832	10.878583	24
37	9.122362	9.996151	9.126211	10.873789	10.003849	10.877638	23
38	9.123306	9.996134	9.127172	10.872828	10.003866	10.876694	22
39	9.124248	9.996117	9.128130	10.871870	10.003883	10.875752	21
40	9.125187	9.996100	9.129087	10.870913	10.003900	10.874813	20
41	9.126125	9.996083	9.130041	10.869959	10.003917	10.873875	19
42	9.127060	9.996066	9.130994	10.869006	10.003934	10.872940	18
43	9.127993	9.996049	9.131944	10.868056	10.003951	10.872007	17
44	9.128925	9.996032	9.132893	10.867107	10.003968	10.871075	16
45	9.129854	9.996015	9.133839	10.866161	10.003985	10.870146	15
46	9.130781	9.995998	9.134784	10.865216	10.004002	10.869219	14
47	9.131706	9.995980	9.135726	10.864274	10.004020	10.868294	13
48	9.132630	9.995963	9.136667	10.863333	10.004037	10.867370	12
49	9.133551	9.995946	9.137605	10.862395	10.004054	10.866449	11
50	9.134470	9.995928	9.138542	10.861458	10.004072	10.865530	10
51	9.135387	9.995911	9.139476	10.860524	10.004089	10.864613	9
52	9.136303	9.995894	9.140409	10.859591	10.004106	10.863697	8
53	9.137216	9.995876	9.141340	10.858660	10.004124	10.862784	7
54	9.138128	9.995859	9.142269	10.857731	10.004141	10.861872	6
55	9.139037	9.995841	9.143196	10.856804	10.004159	10.860963	5
56	9.139944	9.995823	9.144121	10.855879	10.004177	10.860056	4
57	9.140850	9.995806	9.145044	10.854956	10.004194	10.859150	3
58	9.141754	9.995788	9.145966	10.854034	10.004212	10.858246	2
59	9.142655	9.995771	9.146885	10.853115	10.004229	10.857345	1
60	9.143555	9.995753	9.147803	10.852197	10.004247	10.856445	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

97

Degrees 82

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	927.	17.	944	10.	155.	3.	157	5.	77.	1.	79
50.	773.	14.	787	9.	139.	3.	142	4.	62.	1.	63
40.	618.	11.	630	8.	124.	2.	126	3.	46.	1.	47
30.	464.	9.	472	7.	108.	2.	110	2.	31.	1.	32
20.	309.	6.	315	6.	93.	2.	94	1.	15.	0.	16
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Degrees.								171
Min.	Sine.	Co-fns.	Tangent.	Co-tang.	Secant.	10. Co-sec.	0. Co-ar.	Min.
0	9.143555	9.995753	9.147803	10.852197	10.004247	10.856445		60
1	9.144453	9.995735	9.148718	10.851282	10.004265	10.855547		59
2	9.145349	9.995717	9.149632	10.850368	10.004283	10.854651		58
3	9.146243	9.995699	9.150544	10.849456	10.004301	10.853757		57
4	9.147136	9.995681	9.151454	10.848546	10.004319	10.852864		56
5	9.148026	9.995664	9.152363	10.847637	10.004336	10.851974		55
6	9.148915	9.995646	9.153269	10.846731	10.004354	10.851085		54
7	9.149802	9.995628	9.154174	10.845826	10.004372	10.850198		53
8	9.150686	9.995610	9.155077	10.844923	10.004390	10.849314		52
9	9.151569	9.995591	9.155978	10.844022	10.004409	10.848431		51
10	9.152451	9.995573	9.156877	10.843123	10.004427	10.847549		50
11	9.153330	9.995555	9.157775	10.842225	10.004445	10.846670		49
12	9.154208	9.995537	9.158671	10.841329	10.004463	10.845792		48
13	9.155083	9.995519	9.159565	10.840435	10.004481	10.844917		47
14	9.155957	9.995501	9.160457	10.839543	10.004499	10.844043		46
15	9.156830	9.995482	9.161347	10.838653	10.004518	10.843170		45
16	9.157700	9.995464	9.162236	10.837764	10.004536	10.842300		44
17	9.158569	9.995446	9.163123	10.836877	10.004554	10.841431		43
18	9.159435	9.995427	9.164008	10.835992	10.004573	10.840565		42
19	9.160301	9.995409	9.164892	10.835108	10.004591	10.839699		41
20	9.161164	9.995390	9.165774	10.834226	10.004610	10.838836		40
21	9.162025	9.995372	9.166654	10.833346	10.004628	10.837975		39
22	9.162885	9.995353	9.167532	10.832468	10.004647	10.837115		38
23	9.163743	9.995334	9.168409	10.831591	10.004666	10.836257		37
24	9.164600	9.995316	9.169284	10.830716	10.004684	10.835400		36
25	9.165454	9.995297	9.170157	10.829843	10.004703	10.834546		35
26	9.166307	9.995278	9.171029	10.828971	10.004722	10.833693		34
27	9.167159	9.995260	9.171899	10.828101	10.004740	10.832841		33
28	9.168008	9.995241	9.172767	10.827233	10.004759	10.831992		32
29	9.168856	9.995222	9.173634	10.826366	10.004778	10.831144		31
30	9.169702	9.995203	9.174499	10.825501	10.004797	10.830298		30
Min.	Co-fns.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	0. Co-ar.	Min.

Degrees 81

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	870.	18.	890	10.	145.	3.	148	5.	73.	2.	74
50.	725.	15.	742	9.	131.	3.	134	4.	58.	1.	59
40.	580.	12.	594	8.	116.	2.	119	3.	44.	1.	44
30.	435.	9.	445	7.	102.	2.	104	2.	29.	1.	30
20.	290.	6.	297	6.	87.	2.	89	1.	15.	0.	15
Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.	

Log. Sines, Tangents, Secants, &c.

69

8 Degrees.

171

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	10. Co-ar.	Min.
30	9.169702	9.995203	9.174499	10.825501	10.004797	10.830198		30
31	9.170547	9.995184	9.175362	10.824638	10.004816	10.829453		29
32	9.171389	9.995165	9.176224	10.823776	10.004835	10.828611		28
33	9.172230	9.995146	9.177084	10.822916	10.004854	10.827770		27
34	9.173070	9.995127	9.177942	10.822058	10.004873	10.826930		26
35	9.173908	9.995108	9.178799	10.821201	10.004892	10.826092		25
36	9.174744	9.995089	9.179655	10.820345	10.004911	10.825256		24
37	9.175578	9.995070	9.180508	10.819492	10.004930	10.824422		23
38	9.176411	9.995051	9.181360	10.818640	10.004949	10.823589		22
39	9.177242	9.995032	9.182211	10.817789	10.004968	10.822758		21
40	9.178072	9.995013	9.183059	10.816941	10.004987	10.821928		20
41	9.178900	9.994993	9.183907	10.816093	10.005007	10.821100		19
42	9.179726	9.994974	9.184752	10.815248	10.005026	10.820274		18
43	9.180551	9.994955	9.185597	10.814403	10.005045	10.819449		17
44	9.181374	9.994935	9.186439	10.813561	10.005065	10.818626		16
45	9.182196	9.994916	9.187280	10.812720	10.005084	10.817804		15
46	9.183016	9.994896	9.188120	10.811880	10.005104	10.816984		14
47	9.183834	9.994877	9.188958	10.811042	10.005123	10.816166		13
48	9.184651	9.994857	9.189794	10.810206	10.005143	10.815349		12
49	9.185466	9.994838	9.190629	10.809371	10.005163	10.814534		11
50	9.186280	9.994818	9.191462	10.808538	10.005182	10.813720		10
51	9.187092	9.994798	9.192294	10.807706	10.005202	10.812908		9
52	9.187903	9.994779	9.193124	10.806876	10.005221	10.812097		8
53	9.188712	9.994759	9.193953	10.806047	10.005241	10.811288		7
54	9.189519	9.994739	9.194780	10.805220	10.005261	10.810481		6
55	9.190325	9.994720	9.195606	10.804394	10.005280	10.809675		5
56	9.191130	9.994700	9.196430	10.803570	10.005300	10.808870		4
57	9.191933	9.994680	9.197253	10.802747	10.005320	10.808067		3
58	9.192734	9.994660	9.198074	10.801926	10.005340	10.807266		2
59	9.193534	9.994640	9.198894	10.801106	10.005360	10.806466		1
60	9.194332	9.994620	9.199713	10.800287	10.005380	10.805668		0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	10. Co-ar.	Min.

Degrees 81

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	820.	19.	839	10.	137.	3.	140	5.	68.	2.	70
50.	683.	16.	700	9.	123.	3.	126	4.	55.	1.	56
40.	547.	13.	560	8.	111.	3.	112	3.	41.	1.	42
30.	410.	10.	420	7.	96.	3.	98	2.	27.	2.	28
20.	273.	6.	280	6.	82.	2.	84	2.	14.	2.	14
	Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

9 Degrees.								170
Min.	Sine.	Co-fine.	Tahgent.	Co-tang.	Secant.	10. Co-sec.	10. Co-ar.	Min.
0	9.194332	9.994020	9.199713	10.800287	10.005380	10.805668		60
1	9.195129	9.994000	9.200529	10.799471	10.005400	10.804871		59
2	9.195925	9.994580	9.201345	10.798655	10.005420	10.804075		58
3	9.196719	9.994560	9.202159	10.797841	10.005440	10.803281		57
4	9.197511	9.994540	9.202971	10.797029	10.005460	10.802489		56
5	9.198302	9.994519	9.203782	10.796218	10.005481	10.801698		55
6	9.199091	9.994499	9.204592	10.795408	10.005501	10.800909		54
7	9.199879	9.994479	9.205400	10.794600	10.005521	10.800121		53
8	9.200666	9.994459	9.206207	10.793798	10.005541	10.799334		52
9	9.201451	9.994438	9.207013	10.792987	10.005562	10.798549		51
10	9.202234	9.994418	9.207817	10.792183	10.005582	10.797766		50
11	9.203017	9.994398	9.208619	10.791381	10.005602	10.796983		49
12	9.203797	9.994377	9.209420	10.790580	10.005623	10.796203		48
13	9.204577	9.994357	9.210220	10.789780	10.005643	10.795423		47
14	9.205354	9.994336	9.211018	10.788982	10.005664	10.794646		46
15	9.206131	9.994316	9.211815	10.788185	10.005684	10.793869		45
16	9.206906	9.994295	9.212611	10.787389	10.005705	10.793094		44
17	9.207679	9.994274	9.213405	10.786595	10.005723	10.792321		43
18	9.208452	9.994254	9.214198	10.785802	10.005746	10.791548		42
19	9.209222	9.994233	9.214989	10.785011	10.005767	10.790778		41
20	9.209992	9.994212	9.215780	10.784220	10.005788	10.790008		40
21	9.210760	9.994191	9.216568	10.783432	10.005809	10.789240		39
22	9.211526	9.994171	9.217356	10.782644	10.005829	10.788474		38
23	9.212291	9.994150	9.218142	10.781858	10.005850	10.787709		37
24	9.213055	9.994129	9.218926	10.781074	10.005871	10.786945		36
25	9.213818	9.994108	9.219710	10.780290	10.005892	10.786182		35
26	9.214579	9.994087	9.220492	10.779508	10.005913	10.785421		34
27	9.215338	9.994066	9.221272	10.778728	10.005934	10.784662		33
28	9.216097	9.994045	9.222052	10.777948	10.005955	10.783903		32
29	9.216854	9.994024	9.222830	10.777170	10.005976	10.783146		31
30	9.217609	9.994003	9.223607	10.776393	10.005997	10.782391		30
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	10. Co-ar.	Min.

99 Degrees 80

Sine.	Co-f.	Tang.	Sine.	Co-f.	Tang.	Sine.	Co-f.	Tang.
60. 775.	21.	796	10. 129.	3.	133	5. 65.	2.	66
50. 646.	17.	663	9. 116.	3.	119	4. 52.	1.	53
40. 517.	14.	530	8. 103.	3.	106	3. 39.	1.	40
30. 388.	10.	398	7. 90.	2.	93	2. 26.	1.	27
20. 258.	7.	264	6. 78.	2.	80	1. 13.	0.	13
Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

71

9 Degrees.

170

Min	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min
30	9.217609	9.994003	9.223607	10.776393	10.005997	10.782391	30
31	9.218363	9.993982	9.224382	10.775618	10.006018	10.781637	29
32	9.219116	9.993960	9.225156	10.774844	10.006040	10.780884	28
33	9.219868	9.993939	9.225929	10.774071	10.006061	10.780132	27
34	9.220618	9.993918	9.226700	10.773300	10.006082	10.779382	26
35	9.221367	9.993897	9.227471	10.772529	10.006103	10.778633	25
36	9.222115	9.993875	9.228239	10.771761	10.006125	10.777885	24
37	9.222861	9.993854	9.229007	10.770993	10.006146	10.777139	23
38	9.223606	9.993832	9.229773	10.770227	10.006168	10.776394	22
39	9.224349	9.993811	9.230539	10.769461	10.006189	10.775651	21
40	9.225092	9.993789	9.231302	10.768698	10.006211	10.774908	20
41	9.225833	9.993768	9.232065	10.767935	10.006232	10.774167	19
42	9.226573	9.993746	9.232826	10.767174	10.006254	10.773427	18
43	9.227311	9.993725	9.233586	10.766414	10.006275	10.772689	17
44	9.228048	9.993703	9.234345	10.765655	10.006297	10.771952	16
45	9.228784	9.993681	9.235103	10.764897	10.006319	10.771216	15
46	9.229518	9.993660	9.235859	10.764141	10.006340	10.770482	14
47	9.230252	9.993638	9.236614	10.763386	10.006362	10.769748	13
48	9.230984	9.993616	9.237368	10.762632	10.006384	10.769016	12
49	9.231715	9.993594	9.238120	10.761880	10.006406	10.768285	11
50	9.232444	9.993572	9.238872	10.761128	10.006428	10.767556	10
51	9.233172	9.993550	9.239622	10.760378	10.006450	10.766828	9
52	9.233899	9.993528	9.240371	10.759629	10.006472	10.766101	8
53	9.234625	9.993506	9.241118	10.758882	10.006494	10.765375	7
54	9.235349	9.993484	9.241865	10.758135	10.006516	10.764651	6
55	9.236073	9.993462	9.242610	10.757390	10.006538	10.763927	5
56	9.236795	9.993440	9.243354	10.756646	10.006560	10.763205	4
57	9.237515	9.993418	9.244097	10.755903	10.006582	10.762485	3
58	9.238235	9.993396	9.244839	10.755161	10.006604	10.761765	2
59	9.238953	9.993374	9.245579	10.754421	10.006626	10.761047	1
60	9.239670	9.993351	9.246319	10.753681	10.006649	10.760330	0

Min	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min
90							90

Degrees 80

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	735.	22.	756	10.	122.	4.	126	5.	61.	2.	61
50.	612.	18.	630	9.	110.	3.	113	4.	49.	2.	49
40.	490.	14.	504	8.	97.	3.	101	3.	37.	1.	37
30.	367.	11.	378	7.	86.	3.	88	2.	24.	1.	24
20.	245.	7.	252	6.	73.	2.	76	1.	12.	0.	13
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

10 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.			
0	9.239670	9.993351	9.246319	10.753681	10.006649	10.760330	60			
1	9.240386	9.993329	9.247057	10.752943	10.006671	10.759614	59			
2	9.241101	9.993307	9.247794	10.752206	10.006693	10.758899	58			
3	9.241814	9.993284	9.248530	10.751470	10.006716	10.758186	57			
4	9.242526	9.993262	9.249264	10.750736	10.006738	10.757474	56			
5	9.243237	9.993240	9.249998	10.750002	10.006760	10.756763	55			
6	9.243947	9.993217	9.250730	10.749270	10.006783	10.756053	54			
7	9.244656	9.993195	9.251461	10.748539	10.006805	10.755344	53			
8	9.245363	9.993172	9.252191	10.747809	10.006828	10.754637	52			
9	9.246069	9.993149	9.252920	10.747080	10.006851	10.753931	51			
10	9.246775	9.993127	9.253648	10.746352	10.006873	10.753225	50			
11	9.247478	9.993104	9.254374	10.745626	10.006896	10.752521	49			
12	9.248181	9.993081	9.255100	10.744900	10.006919	10.751819	48			
13	9.248883	9.993059	9.255824	10.744176	10.006941	10.751117	47			
14	9.249583	9.993036	9.256547	10.743453	10.006964	10.750417	46			
15	9.250282	9.993013	9.257269	10.742731	10.006987	10.749718	45			
16	9.250980	9.992990	9.257990	10.742010	10.007010	10.749020	44			
17	9.251677	9.992967	9.258710	10.741290	10.007033	10.748323	43			
18	9.252373	9.992944	9.259429	10.740571	10.007056	10.747627	42			
19	9.253067	9.992921	9.260146	10.739854	10.007079	10.746933	41			
20	9.253761	9.992898	9.260863	10.739137	10.007102	10.746239	40			
21	9.254453	9.992875	9.261578	10.738422	10.007125	10.745547	39			
22	9.255144	9.992852	9.262292	10.737708	10.007148	10.744856	38			
23	9.255834	9.992829	9.263005	10.736995	10.007171	10.744166	37			
24	9.256523	9.992806	9.263717	10.736283	10.007194	10.743477	36			
25	9.257211	9.992783	9.264428	10.735572	10.007217	10.742789	35			
26	9.257898	9.992759	9.265138	10.734862	10.007241	10.742103	34			
27	9.258583	9.992736	9.265847	10.734153	10.007264	10.741417	33			
28	9.259268	9.992713	9.266555	10.733445	10.007287	10.740732	32			
29	9.259951	9.992690	9.267261	10.732739	10.007310	10.740049	31			
30	9.260633	9.992666	9.267967	10.732033	10.007334	10.739367	30			
Co-sine. Sine. Co-tang. Tangent. 10. Co-sec. Secant. o. Co-ar.							Min.			
							Degrees 79			
Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.
698.	23.	721	10.	116.	4.	120	5.	58.	2.	60
582.	19.	601	9.	105.	3.	108	4.	47.	2.	48
465.	15.	481	8.	93.	3.	96	3.	35.	1.	36
349.	11.	360	7.	81.	3.	84	2.	23.	1.	24
233.	8.	240	6.	70.	3.	72	1.	12.	0.	12
Co-sine. Sine. Tang.			Co-sine. Sine. Tang.			Co-sine. Sine. Tang.				

Log. Sines, Tangents, Secants, &c.

73

10 Degrees.

169

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	0. Co-ar.	Min.
30	9.260633	9.992666	9.267967	10.732033	10.007334	10.739367		30
31	9.261314	9.992643	9.268671	10.731329	10.007357	10.738686		29
32	9.261994	9.992619	9.269375	10.730625	10.007381	10.738006		28
33	9.262673	9.992596	9.270077	10.729923	10.007404	10.737327		27
34	9.263351	9.992572	9.270779	10.729221	10.007428	10.736649		26
35	9.264027	9.992549	9.271479	10.728521	10.007451	10.735973		25
36	9.264703	9.992525	9.272178	10.727822	10.007475	10.735297		24
37	9.265377	9.992501	9.272876	10.727124	10.007499	10.734623		23
38	9.266051	9.992478	9.273573	10.726427	10.007522	10.733949		22
39	9.266723	9.992454	9.274269	10.725731	10.007546	10.733277		21
40	9.267395	9.992430	9.274964	10.725036	10.007570	10.732605		20
41	9.268065	9.992406	9.275658	10.724342	10.007594	10.731935		19
42	9.268734	9.992382	9.276351	10.723649	10.007618	10.731266		18
43	9.269402	9.992359	9.277043	10.722957	10.007641	10.730598		17
44	9.270069	9.992335	9.277734	10.722266	10.007665	10.729931		16
45	9.270735	9.992311	9.278424	10.721576	10.007689	10.729265		15
46	9.271400	9.992287	9.279113	10.720887	10.007713	10.728600		14
47	9.272064	9.992263	9.279801	10.720199	10.007737	10.727936		13
48	9.272726	9.992239	9.280488	10.719512	10.007761	10.727274		12
49	9.273388	9.992214	9.281174	10.718826	10.007786	10.726613		11
50	9.274049	9.992190	9.281858	10.718142	10.007810	10.725951		10
51	9.274708	9.992166	9.282542	10.717458	10.007834	10.725292		9
52	9.275367	9.992142	9.283225	10.716775	10.007858	10.724633		8
53	9.276025	9.992118	9.283907	10.716093	10.007882	10.723975		7
54	9.276681	9.992093	9.284588	10.715412	10.007907	10.723319		6
55	9.277337	9.992069	9.285268	10.714732	10.007931	10.722663		5
56	9.277991	9.992044	9.285947	10.714053	10.007956	10.722009		4
57	9.278645	9.992020	9.286624	10.713376	10.007980	10.721355		3
58	9.279297	9.991996	9.287301	10.712699	10.008004	10.720703		2
59	9.279948	9.991971	9.287977	10.712023	10.008029	10.720053		1
60	9.280599	9.991947	9.288652	10.711348	10.008053	10.719401		0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	0. Co-ar.	Min.

100

Degrees 70

Sine.	Co.-fi.	Tang.	"	Sine.	Co.-fi.	Tang.	"	Sine.	Co.-fi.	Tang.	
60.	665.	24.	689	10.	111.	4.	115	5.	55.	2.	57
50.	554.	20.	574	9.	100.	4.	103	4.	44.	2.	46
40.	443.	16.	459	8.	89.	3.	92	3.	33.	1.	34
30.	332.	12.	344	7.	78.	3.	80	2.	22.	1.	23
20.	222.	8.	230	6.	66.	2.	69	1.	11.	0.	11
Co.-fi.	Sine.	Tang.		Co.-fi.	Sine.	Tang.		Co.-fi.	Sine.	Tang.	

168

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.
0	9.280599	9.991947	9.288652	10.711348	10.008053	10.719401		60
1	9.281248	9.991922	9.289236	10.710674	10.008078	10.718752		59
2	9.281897	9.991897	9.289999	10.710001	10.008103	10.718103		58
3	9.282544	9.991873	9.290671	10.709329	10.008127	10.717456		57
4	9.283190	9.991848	9.291342	10.708658	10.008152	10.716810		56
5	9.283836	9.991823	9.292013	10.707987	10.008177	10.716164		55
6	9.284480	9.991799	9.292682	10.707318	10.008201	10.715520		54
7	9.285124	9.991774	9.293350	10.706650	10.008226	10.714876		53
8	9.285766	9.991749	9.294017	10.705983	10.008251	10.714234		52
9	9.286408	9.991724	9.294684	10.705316	10.008276	10.713592		51
10	9.287048	9.991699	9.295349	10.704651	10.008301	10.712952		50
11	9.287688	9.991674	9.296013	10.703987	10.008326	10.712312		49
12	9.288326	9.991649	9.296677	10.703323	10.008351	10.711674		48
13	9.288964	9.991624	9.297339	10.702661	10.008376	10.711036		47
14	9.289600	9.991599	9.298001	10.701999	10.008401	10.710400		46
15	9.290236	9.991574	9.298662	10.701338	10.008426	10.709764		45
16	9.290870	9.991549	9.299322	10.700678	10.008451	10.709130		44
17	9.291504	9.991524	9.299980	10.700020	10.008476	10.708496		43
18	9.292137	9.991498	9.300638	10.699362	10.008502	10.707863		42
19	9.292768	9.991473	9.301295	10.698705	10.008527	10.707232		41
20	9.293399	9.991448	9.301951	10.698049	10.008552	10.706601		40
21	9.294029	9.991422	9.302607	10.697393	10.008578	10.705971		39
22	9.294658	9.991397	9.303261	10.696739	10.008603	10.705342		38
23	9.295286	9.991372	9.303914	10.696086	10.008628	10.704714		37
24	9.295913	9.991346	9.304567	10.695433	10.008654	10.704087		36
25	9.296539	9.991321	9.305218	10.694782	10.008679	10.703461		35
26	9.297164	9.991295	9.305869	10.694131	10.008705	10.702836		34
27	9.297788	9.991270	9.306519	10.693481	10.008730	10.702212		33
28	9.298412	9.991244	9.307168	10.692832	10.008756	10.701588		32
29	9.299034	9.991218	9.307816	10.692184	10.008782	10.700966		31
30	9.299655	9.991193	9.308463	10.691537	10.008807	10.700345		30

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
101							

Degrees 78

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	635.	25.	660	10.	106.	4.	110	5.	53.	2.	55
50.	529.	21.	550	9.	95.	4.	99	4.	42.	2.	44
40.	423.	17.	440	8.	85.	3.	88	3.	32.	1.	33
30.	317.	13.	330	7.	74.	3.	77	2.	21.	1.	22
20.	212.	8.	220	6.	63.	3.	66	1.	11.	0.	11
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

75

11 Degrees.							168
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.299655	9.991193	9.308463	10.691537	10.008807	10.700345	30
31	9.300276	9.991167	9.309109	10.690891	10.008833	10.699724	29
32	9.300895	9.991141	9.309754	10.690246	10.008859	10.699105	28
33	9.301514	9.991115	9.310399	10.689601	10.008885	10.698480	27
34	9.302132	9.991090	9.311042	10.688958	10.008910	10.697868	26
35	9.302748	9.991064	9.311685	10.688315	10.008936	10.697252	25
36	9.303364	9.991038	9.312327	10.687673	10.008962	10.696636	24
37	9.303979	9.991012	9.312968	10.687032	10.008988	10.696021	23
38	9.304593	9.990986	9.313608	10.686392	10.009014	10.695407	22
39	9.305207	9.990960	9.314247	10.685753	10.009040	10.694793	21
40	9.305819	9.990934	9.314885	10.685115	10.009066	10.694181	20
41	9.306430	9.990908	9.315523	10.684477	10.009092	10.693570	19
42	9.307041	9.990881	9.316159	10.683841	10.009118	10.692959	18
43	9.307650	9.990855	9.316795	10.683205	10.009145	10.692350	17
44	9.308259	9.990829	9.317430	10.682570	10.009171	10.691741	16
45	9.308867	9.990803	9.318064	10.681936	10.009197	10.691133	15
46	9.309474	9.990777	9.318697	10.681303	10.009223	10.690526	14
47	9.310080	9.990750	9.319330	10.680670	10.009250	10.689920	13
48	9.310685	9.990724	9.319961	10.680039	10.009276	10.689315	12
49	9.311289	9.990697	9.320592	10.679408	10.009303	10.688711	11
50	9.311893	9.990671	9.321222	10.678778	10.009329	10.688107	10
51	9.312495	9.990645	9.321851	10.678149	10.009355	10.687505	9
52	9.313097	9.990618	9.322479	10.677521	10.009382	10.686903	8
53	9.313698	9.990591	9.323106	10.676894	10.009409	10.686302	7
54	9.314297	9.990565	9.323733	10.676267	10.009435	10.685703	6
55	9.314897	9.990538	9.324358	10.675642	10.009462	10.685103	5
56	9.315495	9.990511	9.324983	10.675017	10.009489	10.684505	4
57	9.316092	9.990485	9.325607	10.674393	10.009515	10.683908	3
58	9.316689	9.990458	9.326231	10.673769	10.009542	10.683311	2
59	9.317284	9.990431	9.326853	10.673147	10.009569	10.682716	1
60	9.317879	9.990404	9.327475	10.672525	10.009596	10.682121	0
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

101

Degrees 78

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	607.	26.	633	10.	101.	4.	106	5.	51.	2.	53
50.	506.	22.	528	9.	91.	4.	95	4.	40.	2.	42
40.	405.	18.	422	8.	81.	4.	84	3.	30.	1.	32
30.	303.	13.	317	7.	71.	3.	74	2.	20.	1.	21
20.	202.	9.	211	6.	61.	3.	63	1.	10.	0.	11
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

12 Degrees.							167				
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.				
0	9.317879	9.990404	9.327475	10.672525	10.009596	10.682121	60				
1	9.318473	9.990378	9.328095	10.671905	10.009622	10.681527	59				
2	9.319066	9.990351	9.328715	10.671285	10.009649	10.680934	58				
3	9.319658	9.990324	9.329334	10.670666	10.009676	10.680342	57				
4	9.320249	9.990297	9.329953	10.670047	10.009703	10.679751	56				
5	9.320840	9.990270	9.330570	10.669430	10.009730	10.679160	55				
6	9.321430	9.990243	9.331187	10.668813	10.009757	10.678570	54				
7	9.322019	9.990215	9.331803	10.668197	10.009785	10.677981	53				
8	9.322607	9.990188	9.332418	10.667582	10.009812	10.677393	52				
9	9.323194	9.990161	9.333033	10.666967	10.009839	10.676806	51				
10	9.323780	9.990134	9.333646	10.666354	10.009866	10.676220	50				
11	9.324366	9.990107	9.334259	10.665741	10.009893	10.675634	49				
12	9.324950	9.990079	9.334871	10.665129	10.009921	10.675050	48				
13	9.325534	9.990052	9.335482	10.664518	10.009948	10.674466	47				
14	9.326117	9.990025	9.336093	10.663907	10.009975	10.673883	46				
15	9.326700	9.989997	9.336702	10.663298	10.010003	10.673300	45				
16	9.327281	9.989970	9.337311	10.662689	10.010030	10.672719	44				
17	9.327862	9.989942	9.337919	10.662081	10.010058	10.672138	43				
18	9.328442	9.989915	9.338527	10.661473	10.010085	10.671558	42				
19	9.329021	9.989887	9.339133	10.660867	10.010113	10.670979	41				
20	9.329599	9.989860	9.339739	10.660261	10.010140	10.670401	40				
21	9.330176	9.989832	9.340344	10.659656	10.010168	10.669824	39				
22	9.330753	9.989804	9.340948	10.659052	10.010196	10.669247	38				
23	9.331329	9.989777	9.341552	10.658448	10.010223	10.668671	37				
24	9.331903	9.989749	9.342155	10.657845	10.010251	10.668097	36				
25	9.332478	9.989721	9.342757	10.657243	10.010279	10.667522	35				
26	9.333051	9.989693	9.343358	10.656642	10.010307	10.666949	34				
27	9.333624	9.989665	9.343958	10.656042	10.010335	10.666376	33				
28	9.334195	9.989637	9.344558	10.655442	10.010363	10.665805	32				
29	9.334767	9.989610	9.345157	10.654843	10.010390	10.665233	31				
30	9.335337	9.989582	9.345755	10.654245	10.010418	10.664663	30				
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.				
102	309189						Degrees 77				
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	581.	28.	609	10.	97.	5.	101	5.	48.	2.	51
50.	485.	23.	507	9.	87.	4.	91	4.	39.	2.	41
40.	388.	18.	406	8.	78.	4.	81	3.	29.	1.	30
30.	291.	14.	304	7.	68.	3.	71	2.	19.	1.	10
20.	194.	9.	203	6.	58.	3.	61	1.	10.	0.	9
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

77

12 Degrees.							167
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	Min.
30	9.335337	9.989582	9.345755	10.654245	10.010418	10.664665	30
31	9.335906	9.989553	9.346353	10.653647	10.010447	10.664094	29
32	9.336475	9.989525	9.346949	10.653051	10.010475	10.663525	28
33	9.337043	9.989497	9.347545	10.652455	10.010503	10.662957	27
34	9.337610	9.989469	9.348141	10.651859	10.010531	10.662390	26
35	9.338176	9.989441	9.348735	10.651265	10.010559	10.661827	25
36	9.338742	9.989413	9.349329	10.650671	10.010587	10.661258	24
37	9.339307	9.989385	9.349922	10.650078	10.010615	10.660693	23
38	9.339871	9.989356	9.350514	10.649486	10.010644	10.660129	22
39	9.340434	9.989328	9.351106	10.648894	10.010672	10.659566	21
40	9.340996	9.989300	9.351697	10.648303	10.010700	10.659004	20
41	9.341558	9.989271	9.352287	10.647713	10.010729	10.658442	19
42	9.342119	9.989243	9.352876	10.647124	10.010757	10.657881	18
43	9.342679	9.989214	9.353465	10.646535	10.010786	10.657321	17
44	9.343239	9.989186	9.354053	10.645947	10.010814	10.656761	16
45	9.343797	9.989157	9.354640	10.645360	10.010843	10.656203	15
46	9.344355	9.989128	9.355227	10.644773	10.010872	10.655645	14
47	9.344912	9.989100	9.355813	10.644187	10.010900	10.655088	13
48	9.345469	9.989071	9.356398	10.643602	10.010929	10.654531	12
49	9.346024	9.989042	9.356982	10.643018	10.010958	10.653976	11
50	9.346579	9.989014	9.357566	10.642434	10.010986	10.653421	10
51	9.347134	9.988985	9.358149	10.641851	10.011015	10.652866	9
52	9.347687	9.988956	9.358731	10.641269	10.011044	10.652313	8
53	9.348240	9.988927	9.359313	10.640687	10.011073	10.651760	7
54	9.348792	9.988898	9.359893	10.640107	10.011102	10.651208	6
55	9.349343	9.988869	9.360474	10.639526	10.011131	10.650657	5
56	9.349893	9.988840	9.361053	10.638947	10.011160	10.650107	4
57	9.350443	9.988811	9.361632	10.638368	10.011189	10.649557	3
58	9.350992	9.988782	9.362210	10.637790	10.011218	10.649008	2
59	9.351540	9.988753	9.362787	10.637213	10.011247	10.648460	1
60	9.352088	9.988724	9.363364	10.636636	10.011276	10.647912	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.

Degrees 77

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	558.	29.	587	10.	93.	5.	98	5.	46.	2.	49
50.	465.	24.	489	9.	84.	4.	88	4.	37.	2.	39
40.	372.	19.	391	8.	74.	4.	78	3.	28.	1.	29
30.	279.	24.	293	7.	65.	3.	68	2.	19.	1.	20
20.	186.	9.	196	6.	56.	3.	59	1.	9.	0.	10
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

13 Degrees.

166

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.352088	9.988724	9.363364	10.636636	10.011276	10.647912	60
1	9.352635	9.988695	9.363940	10.636060	10.011305	10.647365	59
2	9.353181	9.988666	9.364515	10.635485	10.011334	10.646819	58
3	9.353726	9.988636	9.365090	10.634910	10.011364	10.646274	57
4	9.354271	9.988607	9.365664	10.634336	10.011393	10.645729	56
5	9.354815	9.988578	9.366237	10.633763	10.011422	10.645185	55
6	9.355358	9.988548	9.366810	10.633190	10.011452	10.644642	54
7	9.355901	9.988519	9.367382	10.632618	10.011481	10.644099	53
8	9.356443	9.988489	9.367953	10.632047	10.011511	10.643557	52
9	9.356984	9.988460	9.368524	10.631476	10.011540	10.643016	51
10	9.357524	9.988430	9.369094	10.630908	10.011570	10.642476	50
11	9.358064	9.988401	9.369663	10.630337	10.011599	10.641936	49
12	9.358603	9.988371	9.370232	10.629768	10.011629	10.641397	48
13	9.359141	9.988342	9.370799	10.629201	10.011658	10.640859	47
14	9.359678	9.988312	9.371367	10.628633	10.011688	10.640322	46
15	9.360215	9.988282	9.371933	10.628067	10.011718	10.639785	45
16	9.360752	9.988252	9.372499	10.627501	10.011748	10.639248	44
17	9.361287	9.988223	9.373064	10.626936	10.011777	10.638713	43
18	9.361822	9.988193	9.373629	10.626371	10.011807	10.638178	42
19	9.362356	9.988163	9.374193	10.625807	10.011837	10.637644	41
20	9.362889	9.988133	9.374756	10.625244	10.011867	10.637111	40
21	9.363422	9.988103	9.375319	10.624681	10.011897	10.636578	39
22	9.363954	9.988073	9.375881	10.624119	10.011927	10.636046	38
23	9.364485	9.988043	9.376442	10.623558	10.011957	10.635515	37
24	9.365016	9.988013	9.377003	10.622997	10.011987	10.634984	36
25	9.365546	9.987983	9.377563	10.622437	10.012017	10.634454	35
26	9.366075	9.987953	9.378122	10.621878	10.012047	10.633925	34
27	9.366604	9.987922	9.378681	10.621319	10.012078	10.633396	33
28	9.367131	9.987892	9.379239	10.620761	10.012108	10.632869	32
29	9.367659	9.987862	9.379797	10.620203	10.012138	10.632341	31
30	9.368185	9.987832	9.380354	10.619646	10.012168	10.631815	30
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

103

Degrees 76

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	536.	30.	566	10.	89.	5.	94	5.	45.	2.	47
50.	447.	25.	472	9.	80.	4.	85	4.	36.	2.	38
40.	357.	20.	377	8.	72.	4.	75	3.	27.	1.	28
30.	268.	15.	283	7.	63.	3.	66	2.	18.	1.	19
20.	179.	10.	189	6.	54.	3.	57	1.	9.	0.	10
Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.	

Log. Sines, Tangents, Secants, &c.

79

13 Degrees.

166

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.368185	9.987832	9.380354	10.619646	10.012168	10.631815	30
31	9.368711	9.987801	9.380910	10.619090	10.012199	10.631289	29
32	9.369236	9.987771	9.381466	10.618534	10.012229	10.630764	28
33	9.369761	9.987740	9.382020	10.617980	10.012260	10.630239	27
34	9.370285	9.987710	9.382575	10.617425	10.012290	10.629715	26
35	9.370808	9.987679	9.383129	10.616871	10.012321	10.629192	25
36	9.371330	9.987649	9.383682	10.616318	10.012351	10.628670	24
37	9.371852	9.987618	9.384234	10.615766	10.012382	10.628148	23
38	9.372373	9.987588	9.384786	10.615214	10.012412	10.627627	22
39	9.372894	9.987557	9.385337	10.614663	10.012443	10.627106	21
40	9.373414	9.987526	9.385888	10.614112	10.012474	10.626586	20
41	9.373933	9.987496	9.386438	10.613562	10.012504	10.626067	19
42	9.374452	9.987465	9.386987	10.613013	10.012535	10.625548	18
43	9.374970	9.987434	9.387536	10.612464	10.012566	10.625030	17
44	9.375487	9.987403	9.388084	10.611916	10.012597	10.624513	16
45	9.376003	9.987372	9.388631	10.611369	10.012628	10.623997	15
46	9.376519	9.987341	9.389178	10.610822	10.012659	10.623481	14
47	9.377035	9.987310	9.389724	10.610276	10.012690	10.622965	13
48	9.377549	9.987279	9.390270	10.609730	10.012721	10.622451	12
49	9.378063	9.987248	9.390815	10.609185	10.012752	10.621937	11
50	9.378577	9.987217	9.391360	10.608640	10.012783	10.621423	10
51	9.379089	9.987186	9.391903	10.608097	10.012814	10.620911	9
52	9.379601	9.987155	9.392447	10.607553	10.012845	10.620399	8
53	9.380113	9.987124	9.392989	10.607011	10.012876	10.619887	7
54	9.380624	9.987092	9.393531	10.606469	10.012908	10.619376	6
55	9.381134	9.987061	9.394073	10.605927	10.012939	10.618866	5
56	9.381643	9.987030	9.394614	10.605386	10.012970	10.618357	4
57	9.382152	9.986998	9.395154	10.604846	10.013002	10.617848	3
58	9.382661	9.986967	9.395694	10.604306	10.013033	10.617339	2
59	9.383168	9.986936	9.396233	10.603767	10.013064	10.616832	1
60	9.383675	9.986904	9.396771	10.603229	10.013096	10.616325	0

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
103							Degrees 76

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	516.	31.	547	10.	86.	5.	91	5.	43.	3.	46
50.	430.	26.	457	9.	77.	5.	82	4.	34.	2.	37
40.	344.	21.	365	8.	69.	4.	73	3.	26.	2.	27
30.	258.	15.	274	7.	60.	4.	64	2.	17.	1.	18
20.	172.	10.	183	6.	52.	3.	55	1.	9.	1.	9
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

14 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.383675	9.986904	9.396771	10.603229	10.013096	10.616325	165
1	9.384182	9.986873	9.397309	10.602691	10.013127	10.615818	59
2	9.384687	9.986841	9.397846	10.602154	10.013159	10.615313	58
3	9.385192	9.986809	9.398383	10.601617	10.013191	10.614808	57
4	9.385697	9.986778	9.398919	10.601081	10.013222	10.614303	56
5	9.386201	9.986746	9.399455	10.600545	10.013254	10.613799	55
6	9.386704	9.986714	9.399990	10.600010	10.013286	10.613296	54
7	9.387207	9.986683	9.400524	10.599476	10.013317	10.612793	53
8	9.387709	9.986651	9.401058	10.598942	10.013349	10.612291	52
9	9.388210	9.986619	9.401591	10.598409	10.013381	10.611790	51
10	9.388711	9.986587	9.402124	10.597876	10.013413	10.611289	50
11	9.389211	9.986555	9.402656	10.597344	10.013445	10.610789	49
12	9.389711	9.986523	9.403187	10.596813	10.013477	10.610289	48
13	9.390210	9.986491	9.403718	10.596282	10.013509	10.609790	47
14	9.390708	9.986459	9.404249	10.595751	10.013541	10.609292	46
15	9.391206	9.986427	9.404778	10.595222	10.013573	10.608794	45
16	9.391703	9.986395	9.405308	10.594692	10.013605	10.608297	44
17	9.392199	9.986363	9.405836	10.594164	10.013637	10.607801	43
18	9.392695	9.986331	9.406364	10.593636	10.013669	10.607305	42
19	9.393191	9.986299	9.406892	10.593108	10.013701	10.606809	41
20	9.393685	9.986266	9.407419	10.592581	10.013734	10.606315	40
21	9.394179	9.986234	9.407945	10.592055	10.013766	10.605821	39
22	9.394673	9.986202	9.408471	10.591529	10.013798	10.605327	38
23	9.395166	9.986169	9.408996	10.591004	10.013831	10.604834	37
24	9.395658	9.986137	9.409521	10.590479	10.013863	10.604342	36
25	9.396150	9.986104	9.410045	10.589955	10.013896	10.603850	35
26	9.396641	9.986072	9.410569	10.589431	10.013928	10.603359	34
27	9.397132	9.986039	9.411092	10.588908	10.013961	10.602868	33
28	9.397621	9.986007	9.411615	10.588385	10.013993	10.602379	32
29	9.398111	9.985974	9.412137	10.587863	10.014026	10.601889	31
30	9.398600	9.985942	9.412658	10.587342	10.014058	10.601400	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

104

Degrees 75

#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.
60.	497.	32.	529	10.	83.	5.	88	5.	41.	3.	44
50.	414.	27.	441	9.	75.	5.	79	4.	33.	2.	35
40.	331.	21.	353	8.	66.	4.	71	3.	25.	2.	26
30.	251.	16.	265	7.	58.	4.	62	2.	17.	1.	18
20.	166.	11.	176	6.	50.	3.	53	1.	8.	1.	9
Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.	

14 Degrees.							165
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. d. Co-ar.	Min.
30	9.398600	9.985942	9.412658	10.587342	10.014058	10.601400	30
31	9.399088	9.985909	9.413799	10.586821	10.014091	10.600912	29
32	9.399575	9.985876	9.413699	10.586301	10.014124	10.600425	28
33	9.400062	9.985843	9.414219	10.585781	10.014157	10.599938	27
34	9.400549	9.985811	9.414738	10.585262	10.014189	10.599451	26
35	9.401035	9.985778	9.415257	10.584743	10.014222	10.598965	25
36	9.401520	9.985745	9.415775	10.584225	10.014255	10.598480	24
37	9.402005	9.985712	9.416293	10.583707	10.014288	10.597995	23
38	9.402489	9.985679	9.416810	10.583190	10.014321	10.597511	22
39	9.402973	9.985646	9.417326	10.582674	10.014354	10.597028	21
40	9.403455	9.985613	9.417842	10.582158	10.014387	10.596545	20
41	9.403938	9.985580	9.418358	10.581642	10.014420	10.596062	19
42	9.404420	9.985547	9.418873	10.581127	10.014453	10.595580	18
43	9.404901	9.985514	9.419387	10.580613	10.014486	10.595099	17
44	9.405382	9.985480	9.419901	10.580099	10.014520	10.594618	16
45	9.405862	9.985447	9.420415	10.579585	10.014553	10.594138	15
46	9.406341	9.985414	9.420927	10.579073	10.014586	10.593659	14
47	9.406820	9.985381	9.421440	10.578560	10.014619	10.593180	13
48	9.407299	9.985347	9.421952	10.578048	10.014653	10.592701	12
49	9.407777	9.985314	9.422463	10.577537	10.014686	10.592223	11
50	9.408254	9.985280	9.422974	10.577020	10.014720	10.591746	10
51	9.408731	9.985247	9.423484	10.576516	10.014753	10.591269	9
52	9.409207	9.985213	9.423993	10.576007	10.014787	10.590793	8
53	9.409682	9.985180	9.424503	10.575497	10.014820	10.590318	7
54	9.410157	9.985146	9.425011	10.574989	10.014854	10.589843	6
55	9.410632	9.985112	9.425519	10.574481	10.014887	10.589368	5
56	9.411106	9.985079	9.426027	10.573973	10.014921	10.588894	4
57	9.411579	9.985045	9.426534	10.573466	10.014955	10.588421	3
58	9.412052	9.985011	9.427041	10.572959	10.014989	10.587948	2
59	9.412524	9.984978	9.427547	10.572453	10.015022	10.587476	1
60	9.412996	9.984944	9.428052	10.571948	10.015056	10.587004	0

Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
104							75

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	480.	33.	513	10.	80.	6.	85	5.	40.	3.	43
50.	400.	28.	427	9.	72.	5.	77	4.	32.	2.	34
40.	320.	22.	342	8.	64.	4.	68	3.	24.	2.	26
30.	240.	17.	256	7.	56.	4.	60	2.	16.	1.	17
20.	160.	11.	171	6.	48.	3.	51	1.	8.	1.	9
	Co-fi.	Sine	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

15 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.412996	9.984944	9.428052	10.571948	10.015056	10.587004	60
1	9.413467	9.984910	9.428558	10.571442	10.015090	10.586533	59
2	9.413938	9.984876	9.429062	10.570938	10.015124	10.586062	58
3	9.414408	9.984842	9.429566	10.570434	10.015158	10.585592	57
4	9.414878	9.984808	9.430070	10.569930	10.015192	10.585122	56
5	9.415347	9.984774	9.430573	10.569427	10.015226	10.584653	55
6	9.415815	9.984740	9.431075	10.568925	10.015260	10.584185	54
7	9.416283	9.984706	9.431577	10.568423	10.015294	10.583717	53
8	9.416751	9.984672	9.432079	10.567921	10.015328	10.583249	52
9	9.417217	9.984638	9.432580	10.567420	10.015362	10.582783	51
10	9.417684	9.984603	9.433080	10.566920	10.015397	10.582316	50
11	9.418150	9.984569	9.433580	10.566420	10.015431	10.581850	49
12	9.418615	9.984535	9.434080	10.565920	10.015465	10.581385	48
13	9.419079	9.984500	9.434579	10.565421	10.015500	10.580921	47
14	9.419544	9.984466	9.435078	10.564922	10.015534	10.580456	46
15	9.420007	9.984432	9.435576	10.564424	10.015568	10.579993	45
16	9.420470	9.984397	9.436073	10.563927	10.015603	10.579530	44
17	9.420933	9.984363	9.436570	10.563430	10.015637	10.579067	43
18	9.421395	9.984328	9.437067	10.562933	10.015672	10.578605	42
19	9.421857	9.984294	9.437563	10.562437	10.015706	10.578143	41
20	9.422318	9.984259	9.438059	10.561941	10.015741	10.577682	40
21	9.422778	9.984224	9.438554	10.561446	10.015776	10.577222	39
22	9.423238	9.984190	9.439048	10.560952	10.015810	10.576762	38
23	9.423697	9.984155	9.439543	10.560457	10.015845	10.576303	37
24	9.424156	9.984120	9.440036	10.559964	10.015880	10.575844	36
25	9.424615	9.984085	9.440529	10.559471	10.015915	10.575385	35
26	9.425073	9.984050	9.441022	10.558978	10.015950	10.574927	34
27	9.425530	9.984015	9.441514	10.558486	10.015985	10.574470	33
28	9.425987	9.983981	9.442006	10.557994	10.016019	10.574013	32
29	9.426443	9.983946	9.442497	10.557503	10.016054	10.573557	31
30	9.426899	9.983911	9.442988	10.557012	10.016089	10.573101	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

105 Degrees.

Degrees 74

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	463.	35.	498	10.	77.	6.	83	5.	37.	3.	42
50.	386.	29.	415	9.	69.	5.	75	4.	31.	2.	33
40.	309.	23.	332	8.	62.	5.	66	3.	23.	2.	25
30.	232.	17.	249	7.	54.	4.	58	2.	15.	1.	17
20.	154.	11.	166	6.	46.	3.	50	1.	8.	1.	8
Co-fi.	Sine.	Tang.	Co-fi.	Sine.	Tang.	Co-fi.	Sine.	Tang.	Co-fi.	Sine.	Tang.

15 Degrees.							164
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	Min.
30	9.426899	9.983911	9.442988	10.557012	10.016089	10.573101	30
31	9.427354	9.983875	9.443479	10.556521	10.016125	10.572646	29
32	9.427809	9.983840	9.443968	10.556032	10.016160	10.572191	28
33	9.428263	9.983805	9.444458	10.555542	10.016195	10.571737	27
34	9.428717	9.983770	9.444947	10.555053	10.016230	10.571283	26
35	9.429170	9.983735	9.445435	10.554565	10.016265	10.570830	25
36	9.429623	9.983700	9.445923	10.554077	10.016300	10.570377	24
37	9.430075	9.983664	9.446411	10.553589	10.016336	10.569925	23
38	9.430527	9.983629	9.446898	10.553102	10.016371	10.569473	22
39	9.430978	9.983594	9.447384	10.552616	10.016406	10.569022	21
40	9.431429	9.983558	9.447870	10.552130	10.016442	10.568571	20
41	9.431879	9.983523	9.448356	10.551644	10.016477	10.568121	19
42	9.432329	9.983487	9.448841	10.551159	10.016513	10.567671	18
43	9.432778	9.983452	9.449326	10.550674	10.016548	10.567222	17
44	9.433226	9.983416	9.449810	10.550190	10.016584	10.566774	16
45	9.433675	9.983381	9.450294	10.549706	10.016619	10.566325	15
46	9.434122	9.983345	9.450777	10.549223	10.016655	10.565878	14
47	9.434569	9.983309	9.451260	10.548740	10.016691	10.565431	13
48	9.435016	9.983273	9.451743	10.548257	10.016727	10.564984	12
49	9.435462	9.983238	9.452225	10.547775	10.016762	10.564538	11
50	9.435908	9.983202	9.452706	10.547294	10.016798	10.564092	10
51	9.436353	9.983166	9.453187	10.546813	10.016834	10.563647	9
52	9.436798	9.983130	9.453668	10.546332	10.016870	10.563202	8
53	9.437242	9.983094	9.454148	10.545852	10.016906	10.562758	7
54	9.437686	9.983058	9.454628	10.545372	10.016942	10.562314	6
55	9.438129	9.983022	9.455107	10.544893	10.016978	10.561871	5
56	9.438572	9.982986	9.455586	10.544414	10.017014	10.561428	4
57	9.439014	9.982950	9.456064	10.543936	10.017050	10.560986	3
58	9.439456	9.982914	9.456542	10.543458	10.017086	10.560544	2
59	9.439897	9.982878	9.457019	10.542981	10.017122	10.560103	1
60	9.440338	9.982842	9.457496	10.542504	10.017159	10.559662	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
105 Degrees.							74
"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.
60.	418.	36.	483	10.	75.	6.	83
50.	373.	30.	403	9.	67.	5.	72
40.	298.	24.	322	8.	60.	5.	64
30.	224.	18.	242	7.	52.	4.	56
20.	149.	12.	161	6.	45.	4.	48
Co-sine.	Sine.	Tang.	Co-sine.	Sine.	Tang.	Co-sine.	Sine.
37.	3.	40	30.	2.	32	22.	2.
30.	2.	24	15.	1.	16	7.	1.
22.	1.	8	7.	1.	8	7.	1.

16 Degrees.								163
Min.	Sine.	Co. sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.
0	9.440338	9.982842	9.457496	10.542504	10.017158	10.559662		60
1	9.440778	9.982805	9.457973	10.542027	10.017195	10.559222		59
2	9.441218	9.982769	9.458449	10.541551	10.017231	10.558782		58
3	9.441658	9.982733	9.458925	10.541075	10.017267	10.558342		57
4	9.442096	9.982696	9.459400	10.540600	10.017304	10.557903		56
5	9.442535	9.982660	9.459875	10.540125	10.017340	10.557465		55
6	9.442973	9.982624	9.460349	10.539651	10.017376	10.557027		54
7	9.443410	9.982587	9.460823	10.539177	10.017413	10.556590		53
8	9.443847	9.982551	9.461297	10.538703	10.017449	10.556153		52
9	9.444284	9.982514	9.461770	10.538230	10.017486	10.555716		51
10	9.444720	9.982477	9.462242	10.537758	10.017523	10.555280		50
11	9.445155	9.982441	9.462715	10.537285	10.017559	10.554845		49
12	9.445590	9.982404	9.463186	10.536811	10.017596	10.554410		48
13	9.446025	9.982367	9.463658	10.536342	10.017633	10.553975		47
14	9.446459	9.982331	9.464128	10.535872	10.017669	10.553541		46
15	9.446893	9.982294	9.464599	10.535401	10.017706	10.553107		45
16	9.447326	9.982257	9.465069	10.534931	10.017743	10.552674		44
17	9.447759	9.982220	9.465539	10.534461	10.017780	10.552241		43
18	9.448191	9.982183	9.466008	10.533992	10.017817	10.551809		42
19	9.448623	9.982146	9.466477	10.533523	10.017854	10.551377		41
20	9.449054	9.982109	9.466945	10.533055	10.017891	10.550946		40
21	9.449485	9.982072	9.467413	10.532587	10.017928	10.550515		39
22	9.449915	9.982035	9.467880	10.532110	10.017965	10.550085		38
23	9.450345	9.981998	9.468347	10.531653	10.018002	10.549655		37
24	9.450775	9.981961	9.468814	10.531186	10.018039	10.549225		36
25	9.451204	9.981924	9.469280	10.530720	10.018076	10.548796		35
26	9.451632	9.981886	9.469746	10.530254	10.018114	10.548368		34
27	9.452060	9.981849	9.470211	10.529789	10.018151	10.547940		33
28	9.452488	9.981812	9.470676	10.529324	10.018188	10.547512		32
29	9.452915	9.981774	9.471141	10.528859	10.018226	10.547085		31
30	9.453342	9.981737	9.471605	10.528395	10.018263	10.546658		30
Min.	Co. sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	o. Co-ar.	Min.
106								Degrees 73

	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	433.	37.	470	10.	72.	6.	78	5.	36.	3.	39
50.	361.	31.	392	9.	65.	6.	70	4.	29.	2.	31
40.	289.	25.	313	8.	58.	5.	63	3.	22.	2.	23
30.	217.	18.	235	7.	51.	4.	55	2.	14.	1.	16
20.	144.	12.	157	6.	43.	4.	47	1.	7.	1.	8
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

85

16 Degrees.

163

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.
30	9.453342	9.981737	9.471605	10.528395	10.018263	10.546658		30
31	9.453708	9.981700	9.472069	10.527931	10.018300	10.546232		29
32	9.454194	9.981662	9.472532	10.527468	10.018338	10.545806		28
33	9.454619	9.981625	9.472995	10.527005	10.018375	10.545381		27
34	9.455044	9.981587	9.473457	10.526543	10.018413	10.544956		26
35	9.455469	9.981549	9.473919	10.526081	10.018451	10.544531		25
36	9.455893	9.981512	9.474381	10.525619	10.018488	10.544107		24
37	9.456316	9.981474	9.474842	10.525158	10.018526	10.543684		23
38	9.456739	9.981436	9.475303	10.524697	10.018564	10.543261		22
39	9.457162	9.981399	9.475763	10.524237	10.018601	10.542838		21
40	9.457584	9.981361	9.476223	10.523777	10.018639	10.542416		20
41	9.458006	9.981323	9.476683	10.523317	10.018677	10.541994		19
42	9.458427	9.981285	9.477142	10.522858	10.018715	10.541573		18
43	9.458848	9.981247	9.477601	10.522399	10.018753	10.541152		17
44	9.459268	9.981209	9.478059	10.521941	10.018791	10.540732		16
45	9.459688	9.981171	9.478517	10.521483	10.018829	10.540312		15
46	9.460108	9.981133	9.478975	10.521025	10.018867	10.539892		14
47	9.460527	9.981095	9.479432	10.520568	10.018905	10.539473		13
48	9.460946	9.981057	9.479889	10.520111	10.018943	10.539054		12
49	9.461364	9.981019	9.480346	10.519655	10.018981	10.538636		11
50	9.461782	9.980981	9.480801	10.519199	10.019019	10.538218		10
51	9.462199	9.980942	9.481257	10.518743	10.019058	10.537801		9
52	9.462616	9.980901	9.481712	10.518288	10.019096	10.537384		8
53	9.463032	9.980866	9.482167	10.517833	10.019134	10.536968		7
54	9.463448	9.980827	9.482621	10.517377	10.019173	10.536552		6
55	9.463864	9.980789	9.483075	10.516925	10.019211	10.536136		5
56	9.464279	9.980750	9.483529	10.516471	10.019250	10.535721		4
57	9.464694	9.980712	9.483982	10.516018	10.019288	10.535306		3
58	9.465108	9.980673	9.484435	10.515565	10.019327	10.534892		2
59	9.465522	9.980635	9.484887	10.515113	10.019365	10.534478		1
60	9.465935	9.980596	9.485339	10.514661	10.019404	10.534065		0

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					o. Co-ar.		

106

Degrees 73

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	420.	38.	458	10.	70.	6.	76	5.	35.	3.	38
50.	350.	33.	381	9.	63.	6.	69	4.	28.	3.	31
40.	280.	25.	305	8.	50.	5.	61	3.	21.	2.	23
30.	210.	19.	229	7.	50.	4.	53	2.	14.	1.	15
20.	140.	13.	153	6.	42.	4.	46	1.	7.	1.	8
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

17 Degrees.							162
Min.	Sine.	Co. sin.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.465935	9.980596	9.485339	10.514661	10.019404	10.534065	60
1	9.466548	9.980558	9.485791	10.514209	10.019442	10.533652	59
2	9.466761	9.980519	9.486242	10.513758	10.019481	10.533239	58
3	9.467173	9.980480	9.486693	10.513307	10.019520	10.532827	57
4	9.467585	9.980442	9.487143	10.512857	10.019558	10.532415	56
5	9.467996	9.980403	9.487593	10.512407	10.019597	10.532004	55
6	9.468407	9.980364	9.488043	10.511957	10.019636	10.531593	54
7	9.468817	9.980325	9.488492	10.511508	10.019675	10.531183	53
8	9.469227	9.980286	9.488941	10.511059	10.019714	10.530773	52
9	9.469636	9.980247	9.489390	10.510610	10.019753	10.530363	51
10	9.470046	9.980208	9.489838	10.510162	10.019792	10.529954	50
11	9.470455	9.980169	9.490286	10.509714	10.019831	10.529545	49
12	9.470863	9.980130	9.490733	10.509267	10.019870	10.529137	48
13	9.471271	9.980091	9.491180	10.508820	10.019909	10.528729	47
14	9.471679	9.980052	9.491627	10.508373	10.019948	10.528321	46
15	9.472086	9.980012	9.492073	10.507927	10.019988	10.527914	45
16	9.472492	9.979973	9.492519	10.507481	10.020027	10.527508	44
17	9.472898	9.979934	9.492965	10.507035	10.020066	10.527102	43
18	9.473304	9.979895	9.493410	10.506590	10.020105	10.526696	42
19	9.473710	9.979855	9.493854	10.506146	10.020145	10.526290	41
20	9.474115	9.979816	9.494299	10.505701	10.020184	10.525885	40
21	9.474519	9.979776	9.494743	10.505257	10.020224	10.525481	39
22	9.474923	9.979737	9.495186	10.504814	10.020263	10.525077	38
23	9.475327	9.979697	9.495630	10.504370	10.020303	10.524673	37
24	9.475730	9.979658	9.496073	10.503927	10.020342	10.524270	36
25	9.476133	9.979618	9.496515	10.503485	10.020382	10.523867	35
26	9.476536	9.979579	9.496957	10.503043	10.020421	10.523464	34
27	9.476938	9.979539	9.497399	10.502601	10.020461	10.523062	33
28	9.477340	9.979499	9.497841	10.502159	10.020501	10.522660	32
29	9.477741	9.979459	9.498282	10.501718	10.020541	10.522259	31
30	9.478142	9.979420	9.498722	10.501278	10.020580	10.521858	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
107							107

Degrees 72

"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.
60.	407.	39.	446	10.	68.	7.	74	5.	34.	3.	37
50.	339.	33.	372	9.	61.	6.	67	4.	27.	3.	30
40.	271.	26.	297	8.	54.	5.	59	3.	20.	2.	22
30.	203.	20.	223	7.	47.	5.	52	2.	14.	1.	15
20.	136.	13.	149	6.	41.	4.	45	1.	7.	1.	7
	Co-si.	Sine.	Tang.		Co-si.	Sine.	Tang.		Co-si.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

87

17 Degrees.

162

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.478142	9.979420	9.498722	10.501278	10.020580	10.521858	30
31	9.478542	9.979380	9.499163	10.500837	10.020620	10.521458	29
32	9.478942	9.979340	9.499603	10.500397	10.020660	10.521058	28
33	9.479342	9.979300	9.500042	10.499958	10.020700	10.520658	27
34	9.479741	9.979260	9.500481	10.499519	10.020740	10.520259	26
35	9.480140	9.979220	9.500920	10.499080	10.020780	10.519860	25
36	9.480539	9.979180	9.501359	10.498641	10.020820	10.519461	25
37	9.480937	9.979140	9.501797	10.498203	10.020860	10.519063	23
38	9.481334	9.979100	9.502235	10.497765	10.020900	10.518666	22
39	9.481731	9.979059	9.502672	10.497328	10.020941	10.518269	21
40	9.482128	9.979019	9.503109	10.496891	10.020981	10.517872	20
41	9.482525	9.978979	9.503546	10.496454	10.021021	10.517475	19
42	9.482921	9.978939	9.503982	10.496018	10.021061	10.517079	18
43	9.483316	9.978898	9.504418	10.495582	10.021102	10.516684	17
44	9.483712	9.978858	9.504854	10.495146	10.021142	10.516288	16
45	9.484107	9.978817	9.505289	10.494711	10.021183	10.515893	15
46	9.484501	9.978777	9.505724	10.494276	10.021223	10.515499	14
47	9.484895	9.978737	9.506159	10.493841	10.021263	10.515105	13
48	9.485289	9.978696	9.506593	10.493407	10.021304	10.514711	12
49	9.485682	9.978655	9.507027	10.492973	10.021345	10.514318	11
50	9.486075	9.978615	9.507460	10.492540	10.021385	10.513925	10
51	9.486467	9.978574	9.507893	10.492107	10.021426	10.513533	9
52	9.486860	9.978533	9.508326	10.491674	10.021467	10.513140	8
53	9.487251	9.978493	9.508759	10.491241	10.021507	10.512749	7
54	9.487643	9.978452	9.509191	10.490809	10.021548	10.512357	6
55	9.488034	9.978411	9.509622	10.490378	10.021589	10.511966	5
56	9.488424	9.978370	9.510054	10.489946	10.021630	10.511576	4
57	9.488814	9.978329	9.510485	10.489515	10.021671	10.511186	3
58	9.489204	9.978288	9.510916	10.489084	10.021712	10.510796	2
59	9.489593	9.978247	9.511346	10.488654	10.021753	10.510407	1
60	9.489982	9.978206	9.511776	10.488224	10.021794	10.510018	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

107

Degrees 72

Sine.	Co-fi.	Tang.	Sine.	Co-fi.	Tang.	Sine.	Co-fi.	Tang.			
66.	394.	41.	435	10.	66.	7.	72	5.	33.	3.	36
50.	329.	34.	362	9.	59.	6.	65	4.	26.	3.	29
40.	263.	27.	290	8.	52.	5.	58	3.	20.	2.	22
30.	197.	20.	219	7.	46.	5.	51	2.	13.	1.	15
20.	131.	13.	145	6.	39.	4.	43	1.	7.	1.	7
Co-fi.	Sine.	Tang.	Co-fi.	Sine.	Tang.	Co-fi.	Sine.	Tang.			

18 Degrees.								161
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.
0	9.489982	9.978206	9.511776	10.488724	10.021794	10.510018		60
1	9.490371	9.978165	9.512206	10.487794	10.021835	10.509629		59
2	9.490759	9.978124	9.512635	10.487365	10.021876	10.509241		58
3	9.491147	9.978083	9.513064	10.486936	10.021917	10.508853		57
4	9.491535	9.978042	9.513493	10.486507	10.021958	10.508465		56
5	9.491923	9.978001	9.513921	10.486079	10.021999	10.508078		55
6	9.492308	9.977959	9.514349	10.485651	10.022041	10.507692		54
7	9.492695	9.977918	9.514777	10.485223	10.022082	10.507305		53
8	9.493081	9.977877	9.515204	10.484796	10.022123	10.506919		52
9	9.493466	9.977835	9.515631	10.484369	10.022165	10.506534		51
10	9.493851	9.977794	9.516057	10.483943	10.022206	10.506149		50
11	9.494236	9.977752	9.516484	10.483516	10.022248	10.505764		49
12	9.494621	9.977711	9.516910	10.483090	10.022289	10.505379		48
13	9.495005	9.977669	9.517335	10.482665	10.022331	10.504995		47
14	9.495388	9.977628	9.517761	10.482239	10.022372	10.504612		46
15	9.495772	9.977586	9.518185	10.481814	10.022414	10.504228		45
16	9.496154	9.977544	9.518610	10.481390	10.022456	10.503845		44
17	9.496537	9.977503	9.519034	10.480966	10.022497	10.503463		43
18	9.496919	9.977461	9.519458	10.480542	10.022539	10.503081		42
19	9.497301	9.977419	9.519882	10.480118	10.022581	10.502699		41
20	9.497682	9.977377	9.520305	10.479695	10.022623	10.502318		40
21	9.498064	9.977335	9.520728	10.479272	10.022665	10.501936		39
22	9.498444	9.977293	9.521151	10.478849	10.022707	10.501556		38
23	9.498825	9.977251	9.521573	10.478427	10.022749	10.501175		37
24	9.499204	9.977209	9.521995	10.478005	10.022791	10.500796		36
25	9.499584	9.977167	9.522417	10.477583	10.022833	10.500416		35
26	9.499963	9.977125	9.522838	10.477162	10.022875	10.500037		34
27	9.500342	9.977083	9.523259	10.476741	10.022917	10.499658		33
28	9.500721	9.977041	9.523680	10.476320	10.022959	10.499279		32
29	9.501099	9.976999	9.524100	10.475900	10.023001	10.498901		31
30	9.501476	9.976957	9.524520	10.475480	10.023043	10.498524		30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	o. Co-ar.	Min.
108								

Degrees 71

"	Sine.	Co-f.	Tang.	"	Co-f.	Sine.	Tang.	"	Sine.	Co-f.	Tang.
60.	383.	42.	425	10.	64.	7.	71	5.	32.	3.	35
50.	319.	35.	354	9.	57.	6.	64	4.	26.	3.	28
40.	255.	28.	283	8.	51.	6.	57	3.	19.	2.	21
30.	191.	21.	212	7.	45.	5.	50	2.	13.	1.	14
20.	128.	14.	142	6.	38.	4.	42	1.	6.	1.	7
Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.	

Log. Sines, Tangents, Secants, &c.

89

18 Degrees.							161
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.501476	9.976957	9.524520	10.475480	10.023043	10.498524	30
31	9.501854	9.976914	9.524940	10.475060	10.023086	10.498146	29
32	9.502231	9.976872	9.525359	10.474641	10.023128	10.497769	28
33	9.502607	9.976830	9.525778	10.474222	10.023170	10.497393	27
34	9.502984	9.976787	9.526197	10.473803	10.023213	10.497016	26
35	9.503360	9.976745	9.526615	10.473385	10.023255	10.496640	25
36	9.503735	9.976702	9.527033	10.472967	10.023298	10.496265	24
37	9.504110	9.976660	9.527451	10.472549	10.023340	10.495890	23
38	9.504485	9.976617	9.527868	10.462132	10.023383	10.495515	22
39	9.504860	9.976574	9.528285	10.471715	10.023426	10.495140	21
40	9.505234	9.976532	9.528702	10.471298	10.023468	10.494766	20
41	9.505608	9.976489	9.529119	10.470881	10.023511	10.494392	19
42	9.505981	9.976446	9.529535	10.470465	10.023554	10.494019	18
43	9.506354	9.976404	9.529951	10.470049	10.023596	10.493646	17
44	9.506727	9.976361	9.530366	10.469634	10.023639	10.493273	16
45	9.507099	9.976318	9.530781	10.469219	10.023682	10.492901	15
46	9.507471	9.976275	9.531196	10.468804	10.023725	10.492529	14
47	9.507843	9.976232	9.531611	10.468389	10.023768	10.492157	13
48	9.508214	9.976189	9.532025	10.467975	10.023811	10.491786	12
49	9.508585	9.976146	9.532439	10.467561	10.023854	10.491415	11
50	9.508956	9.976103	9.532853	10.467147	10.023897	10.491044	10
51	9.509326	9.976060	9.533266	10.466734	10.023940	10.490674	9
52	9.509696	9.976017	9.533679	10.466321	10.023983	10.490304	8
53	9.510065	9.975974	9.534092	10.465908	10.024026	10.489935	7
54	9.510434	9.975930	9.534504	10.465496	10.024070	10.489566	6
55	9.510803	9.975887	9.534916	10.465084	10.024113	10.489197	5
56	9.511172	9.975844	9.535328	10.464672	10.024156	10.488828	4
57	9.511540	9.975800	9.535739	10.464261	10.024200	10.488460	3
58	9.511907	9.975757	9.536150	10.463850	10.024243	10.488093	2
59	9.512275	9.975714	9.536561	10.463439	10.024286	10.487725	1
60	9.512642	9.975670	9.536972	10.463028	10.024330	10.487358	0

Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
108							Degrees 71

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	372.	43.	415	10.	62.	7.	69	5.	31.	4.	35
50.	310.	36.	346	9.	56.	6.	62	4.	25.	3.	28
40.	248.	29.	277	8.	50.	6.	55	3.	19.	2.	21
30.	186.	21.	207	7.	43.	5.	48	2.	12.	1.	14
20.	124.	14.	138	6.	37.	4.	41	1.	6.	1.	7
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

19 Degrees.							160
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.512642	9.975670	9.536972	10.463028	10.024330	10.487358	60
1	9.513009	9.975627	9.537382	10.462618	10.024373	10.486991	59
2	9.513375	9.975583	9.537792	10.462208	10.024417	10.486625	58
3	9.513741	9.975539	9.538202	10.461798	10.024461	10.486259	57
4	9.514107	9.975496	9.538611	10.461389	10.024504	10.485893	56
5	9.514472	9.975452	9.539020	10.460980	10.024548	10.485528	55
6	9.514837	9.975408	9.539429	10.460571	10.024592	10.485163	54
7	9.515202	9.975365	9.539837	10.460163	10.024635	10.484798	53
8	9.515566	9.975321	9.540245	10.459755	10.024679	10.484434	52
9	9.515930	9.975277	9.540653	10.459347	10.024723	10.484070	51
10	9.516294	9.975233	9.541061	10.458939	10.024767	10.483706	50
11	9.516657	9.975189	9.541468	10.458532	10.024811	10.483343	49
12	9.517020	9.975145	9.541875	10.458125	10.024855	10.482980	48
13	9.517382	9.975101	9.542281	10.457719	10.024899	10.482618	47
14	9.517745	9.975057	9.542688	10.457312	10.024943	10.482255	46
15	9.518107	9.975013	9.543094	10.456906	10.024987	10.481893	45
16	9.518468	9.974969	9.543499	10.456501	10.025031	10.481532	44
17	9.518829	9.974925	9.543905	10.456095	10.025075	10.481171	43
18	9.519190	9.974880	9.544310	10.455690	10.025120	10.480810	42
19	9.519551	9.974836	9.544715	10.455285	10.025164	10.480449	41
20	9.519911	9.974792	9.545119	10.454881	10.025208	10.480089	40
21	9.520271	9.974748	9.545524	10.454476	10.025252	10.479729	39
22	9.520631	9.974703	9.545928	10.454072	10.025297	10.479369	38
23	9.520990	9.974659	9.546331	10.453669	10.025341	10.479010	37
24	9.521349	9.974614	9.546735	10.453265	10.025386	10.478651	36
25	9.521707	9.974570	9.547138	10.452862	10.025430	10.478293	35
26	9.522066	9.974525	9.547540	10.452460	10.025475	10.477934	34
27	9.522424	9.974481	9.547943	10.452057	10.025519	10.477576	33
28	9.522781	9.974436	9.548345	10.451655	10.025564	10.477219	32
29	9.523138	9.974391	9.548747	10.451253	10.025609	10.476862	31
30	9.523495	9.974347	9.549149	10.450851	10.025653	10.476505	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
109							
Degrees 70							

#	Sine.	Co-fi.	Tang.	#	Co-fi.	Sine.	Tang.	#	Sine.	Co-fi.	Tang.
60.	362.	44.	406	10.	60.	7.	68	5.	30.	4.	34
50.	301.	37.	338	9.	54.	7.	61	4.	24.	3.	27
40.	241.	29.	270	8.	48.	6.	54	3.	18.	2.	20
30.	181.	22.	203	7.	42.	5.	47	2.	12.	1.	14
20.	121.	15.	135	6.	36.	4.	41	1.	6.	1.	7
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

91

19 Degrees.

160

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.523495	9.974347	9.549149	10.450851	10.025653	10.476505	30
31	9.523852	9.974302	9.549550	10.450450	10.025698	10.476148	29
32	9.524208	9.974257	9.549951	10.450049	10.025743	10.475792	28
33	9.524564	9.974212	9.550352	10.449648	10.025788	10.475436	27
34	9.524920	9.974167	9.550752	10.449248	10.025833	10.475080	26
35	9.525275	9.974122	9.551153	10.448847	10.025878	10.474725	25
36	9.525630	9.974077	9.551552	10.448448	10.025923	10.474370	24
37	9.525984	9.974032	9.551952	10.448048	10.025968	10.474016	23
38	9.526339	9.973987	9.552352	10.447649	10.026013	10.473661	22
39	9.526693	9.973942	9.552750	10.447250	10.026058	10.473307	21
40	9.527046	9.973897	9.553149	10.446851	10.026103	10.472954	20
41	9.527400	9.973852	9.553548	10.446452	10.026148	10.472600	19
42	9.527753	9.973807	9.553946	10.446054	10.026193	10.472247	18
43	9.528105	9.973761	9.554344	10.445656	10.026239	10.471895	17
44	9.528458	9.973716	9.554741	10.445259	10.026284	10.471542	16
45	9.528810	9.973671	9.555139	10.444861	10.026329	10.471190	15
46	9.529161	9.973625	9.555536	10.444464	10.026375	10.470839	14
47	9.529513	9.973580	9.555933	10.444067	10.026420	10.470487	13
48	9.529864	9.973535	9.556329	10.443671	10.026465	10.470136	12
49	9.530215	9.973489	9.556725	10.443275	10.026511	10.469785	11
50	9.530565	9.973444	9.557121	10.442879	10.026556	10.469435	10
51	9.530915	9.973398	9.557517	10.442483	10.026602	10.469085	9
52	9.531265	9.973352	9.557913	10.442087	10.026648	10.468735	8
53	9.531614	9.973307	9.558308	10.441692	10.026693	10.468386	7
54	9.531963	9.973261	9.558703	10.441297	10.026739	10.468037	6
55	9.532312	9.973215	9.559097	10.440903	10.026785	10.467688	5
56	9.532661	9.973169	9.559491	10.440509	10.026831	10.467339	4
57	9.533009	9.973124	9.559885	10.440115	10.026876	10.466991	3
58	9.533357	9.973078	9.560279	10.439721	10.026922	10.466643	2
59	9.533704	9.973032	9.560673	10.439327	10.026968	10.466296	1
60	9.534052	9.972986	9.561066	10.438934	10.027014	10.465948	0
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

109

Degrees 70

Sine.	Co-fi.	Tang.	Sine.	Co-fi.	Tang.	Sine.	Co-fi.	Tang.			
60.	352.	45.	397	10.	59.	8.	66	5.	29.	4.	33
50.	293.	38.	331	9.	53.	7.	60	4.	23.	3.	26
40.	234.	30.	265	8.	47.	6.	54	3.	18.	2.	20
30.	176.	23.	199	7.	41.	5.	47	2.	12.	2.	13
20.	117.	15.	132	6.	35.	5.	40	1.	6.	1.	7
Co-fi.	Sine.	Tang.	Co-fi.	Sine.	Tang.	Co-fi.	Sine.	Tang.			

20 Degrees.

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.544325	9.971588	9.572738	10.427262	10.028412	10.455675	30
31	9.544663	9.971540	9.573123	10.426877	10.028460	10.455337	29
32	9.545000	9.971493	9.573507	10.426493	10.028507	10.455000	28
33	9.545338	9.971446	9.573892	10.426108	10.028554	10.454662	27
34	9.545674	9.971398	9.574276	10.425724	10.028602	10.454326	26
35	9.546011	9.971351	9.574660	10.425340	10.028649	10.453989	25
36	9.546347	9.971303	9.575044	10.424956	10.028697	10.453653	24
37	9.546683	9.971256	9.575427	10.424573	10.028744	10.453317	23
38	9.547019	9.971208	9.575810	10.424190	10.028792	10.452981	22
39	9.547354	9.971161	9.576193	10.423807	10.028839	10.452646	21
40	9.547689	9.971113	9.576576	10.423424	10.028887	10.452311	20
41	9.548024	9.971066	9.576959	10.423041	10.028934	10.451976	19
42	9.548359	9.971018	9.577341	10.422659	10.028982	10.451641	18
43	9.548693	9.970970	9.577723	10.422277	10.029030	10.451307	17
44	9.549027	9.970922	9.578104	10.421896	10.029078	10.450973	16
45	9.549360	9.970874	9.578486	10.421514	10.029126	10.450640	15
46	9.549693	9.970827	9.578867	10.421133	10.029173	10.450307	14
47	9.550026	9.970779	9.579248	10.420752	10.029221	10.449974	13
48	9.550359	9.970731	9.579629	10.420371	10.029269	10.449641	12
49	9.550692	9.970683	9.580009	10.419991	10.029317	10.449308	11
50	9.551024	9.970635	9.580389	10.419611	10.029365	10.448976	10
51	9.551356	9.970586	9.580769	10.419231	10.029414	10.448644	9
52	9.551687	9.970538	9.581149	10.418851	10.029462	10.448313	8
53	9.552018	9.970490	9.581528	10.418472	10.029510	10.447982	7
54	9.552349	9.970442	9.581907	10.418093	10.029558	10.447651	6
55	9.552680	9.970394	9.582286	10.417714	10.029606	10.447320	5
56	9.553010	9.970345	9.582665	10.417335	10.029655	10.446990	4
57	9.553341	9.970297	9.583044	10.416956	10.029703	10.446659	3
58	9.553670	9.970249	9.583422	10.416578	10.029751	10.446330	2
59	9.554000	9.970200	9.583800	10.416200	10.029800	10.446000	1
60	9.554329	9.970152	9.584177	10.415823	10.029848	10.445671	0
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

110

Degrees 69

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	333.	47.	381	10.	56.	8.	64	5.	28.	4.	32
50.	278.	39.	318	9.	50.	7.	57	4.	22.	3.	25
40.	222.	31.	254	8.	44.	6.	51	3.	17.	2.	19
30.	167.	23.	191	7.	39.	5.	44	2.	11.	2.	13
20.	111.	16.	127	6.	33.	5.	38	1.	6.	1.	6
Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.	

21 Degrees.

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	Co-sec.	Min.
						O. Co-ar.	
0	9.554329	9.970152	9.534177	10.415823	10.029848	10.445671	160
1	9.554658	9.970103	9.584535	10.415465	10.029897	10.445342	59
2	9.554987	9.970053	9.584932	10.415068	10.029945	10.445013	58
3	9.555315	9.970006	9.585309	10.414691	10.029994	10.444685	57
4	9.555643	9.969957	9.585686	10.414314	10.030043	10.444357	56
5	9.555971	9.969909	9.586062	10.413938	10.030091	10.444029	55
6	9.556299	9.969860	9.586439	10.413561	10.030140	10.443701	54
7	9.556626	9.969811	9.586815	10.413185	10.030189	10.443374	53
8	9.556953	9.969762	9.587190	10.412810	10.030238	10.443047	52
9	9.557280	9.969714	9.587566	10.412434	10.030287	10.442720	51
10	9.557606	9.969665	9.587941	10.412059	10.030335	10.442394	50
11	9.557932	9.969616	9.588316	10.411684	10.030384	10.442068	49
12	9.558258	9.969567	9.588691	10.411309	10.030433	10.441742	48
13	9.558583	9.969518	9.589066	10.410934	10.030482	10.441417	47
14	9.558909	9.969469	9.589440	10.410560	10.030531	10.441091	46
15	9.559234	9.969420	9.589814	10.410186	10.030580	10.440766	45
16	9.559558	9.969370	9.590188	10.409812	10.030630	10.440442	44
17	9.559883	9.969321	9.590562	10.409438	10.030679	10.440117	43
18	9.560207	9.969272	9.590935	10.409065	10.030728	10.439793	42
19	9.560531	9.969223	9.591308	10.408692	10.030777	10.439469	41
20	9.560855	9.969173	9.591681	10.408319	10.030827	10.439145	40
21	9.561178	9.969124	9.592054	10.407946	10.030876	10.438822	39
22	9.561501	9.969075	9.592428	10.407574	10.030925	10.438498	38
23	9.561824	9.969025	9.592799	10.407201	10.030975	10.438176	37
24	9.562146	9.968976	9.593171	10.406829	10.031024	10.437854	36
25	9.562468	9.968926	9.593542	10.406458	10.031074	10.437532	35
26	9.562790	9.968877	9.593914	10.406086	10.031123	10.437210	34
27	9.563112	9.968827	9.594285	10.405715	10.031173	10.436888	33
28	9.563433	9.968777	9.594656	10.405344	10.031223	10.436566	32
29	9.563755	9.968728	9.595027	10.404973	10.031272	10.436245	31
30	9.564075	9.968678	9.595398	10.404602	10.031322	10.435925	30
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	Co-sec.	Secant.	Min.
					O. Co-ar.		

Degrees 68

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	325.	49.	374	10.	54.	8.	62	5.	27.	4.	31
50.	271.	41.	312	9.	49.	7.	56	4.	22.	3.	25
40.	216.	33.	249	8.	43.	7.	50	3.	16.	2.	19
30.	162.	25.	187	7.	38.	6.	44	2.	11.	2.	12
20.	108.	16.	125	6.	32.	5.	37	1.	5.	1.	6
	Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

95

21 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	p. Co-ar.	Min.
30	9.564075	9.968678	9.595398	10.404602	10.031322	10.435925		30
31	9.564396	9.968628	9.595768	10.404232	10.031372	10.435604		29
32	9.564716	9.968578	9.596138	10.403862	10.031422	10.435284		28
33	9.565036	9.968528	9.596508	10.403492	10.031472	10.434964		27
34	9.565356	9.968479	9.596878	10.403122	10.031522	10.434644		26
35	9.565676	9.968429	9.597247	10.402753	10.031571	10.434324		25
36	9.565995	9.968379	9.597616	10.402384	10.031621	10.434005		24
37	9.566314	9.968329	9.597985	10.402015	10.031671	10.433686		23
38	9.566632	9.968278	9.598354	10.401646	10.031722	10.433368		22
39	9.566951	9.968228	9.598722	10.401278	10.031772	10.433049		21
40	9.567269	9.968178	9.599091	10.400909	10.031822	10.432731		20
41	9.567587	9.968128	9.599459	10.400541	10.031872	10.432413		19
42	9.567904	9.968078	9.599827	10.400173	10.031922	10.432096		18
43	9.568222	9.968027	9.600194	10.399806	10.031973	10.431778		17
44	9.568539	9.967977	9.600562	10.399438	10.032023	10.431461		16
45	9.568856	9.967927	9.600929	10.399071	10.032073	10.431144		15
46	9.569172	9.967876	9.601296	10.398704	10.032124	10.430828		14
47	9.569488	9.967826	9.601663	10.398337	10.032174	10.430512		13
48	9.569804	9.967775	9.602029	10.397971	10.032225	10.430196		12
49	9.570120	9.967725	9.602395	10.397605	10.032275	10.429880		11
50	9.570435	9.967674	9.602761	10.397239	10.032326	10.429565		10
51	9.570751	9.967624	9.603127	10.396873	10.032376	10.429249		9
52	9.571066	9.967573	9.603493	10.396507	10.032427	10.428934		8
53	9.571380	9.967522	9.603858	10.396142	10.032478	10.428620		7
54	9.571695	9.967471	9.604223	10.395777	10.032529	10.428305		6
55	9.572009	9.967421	9.604588	10.395412	10.032579	10.427991		5
56	9.572323	9.967370	9.604953	10.395047	10.032630	10.427677		4
57	9.572636	9.967319	9.605317	10.394683	10.032681	10.427364		3
58	9.572950	9.967268	9.605682	10.394318	10.032732	10.427050		2
59	9.573263	9.967217	9.606046	10.393954	10.032783	10.426737		1
60	9.573575	9.967166	9.606410	10.393590	10.032834	10.426425		0

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					o. Co-ar.		

111

Degrees 68

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	317.	50.	367	10.	53.	8.	63	5.	26.	4.	31
50.	264.	42.	314	9.	47.	8.	57	4.	21.	3.	25
40.	211.	33.	251	8.	42.	7.	50	3.	16.	3.	19
30.	158.	25.	188	7.	37.	6.	44	2.	11.	2.	13
20.	106.	17.	126	6.	32.	5.	37	1.	5.	1.	6
	Co-fi.	Sine	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

22 Degrees.							157
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.573575	9.967166	9.606410	10.393590	10.032834	10.426425	60
1	9.573888	9.967115	9.606773	10.393227	10.032885	10.426112	59
2	9.574200	9.967064	9.607137	10.392863	10.032936	10.425800	58
3	9.574512	9.967013	9.607500	10.392500	10.032987	10.425488	57
4	9.574824	9.966961	9.607863	10.392137	10.033039	10.425176	56
5	9.575136	9.966910	9.608225	10.391775	10.033090	10.424864	55
6	9.575447	9.966859	9.608588	10.391412	10.033141	10.424553	54
7	9.575758	9.966808	9.608950	10.391050	10.033192	10.424242	53
8	9.576069	9.966756	9.609312	10.390688	10.033244	10.423931	52
9	9.576379	9.966705	9.609674	10.390326	10.033295	10.423621	51
10	9.576689	9.966653	9.610036	10.389964	10.033347	10.423311	50
11	9.576999	9.966602	9.610397	10.389603	10.033398	10.423001	49
12	9.577309	9.966550	9.610759	10.389241	10.033450	10.422691	48
13	9.577618	9.966499	9.611120	10.388880	10.033501	10.422382	47
14	9.577927	9.966447	9.611480	10.388520	10.033553	10.422073	46
15	9.578236	9.966395	9.611841	10.388159	10.033605	10.421764	45
16	9.578545	9.966344	9.612201	10.387799	10.033656	10.421455	44
17	9.578853	9.966292	9.612561	10.387439	10.033708	10.421147	43
18	9.579162	9.966240	9.612921	10.387079	10.033760	10.420838	42
19	9.579470	9.966188	9.613281	10.386719	10.033812	10.420530	41
20	9.579777	9.966136	9.613641	10.386359	10.033864	10.420223	40
21	9.580085	9.966085	9.614000	10.386000	10.033915	10.419915	39
22	9.580392	9.966033	9.614359	10.385641	10.033967	10.419608	38
23	9.580699	9.965981	9.614718	10.385282	10.034019	10.419301	37
24	9.581005	9.965929	9.615077	10.384923	10.034071	10.418995	36
25	9.581312	9.965876	9.615435	10.384565	10.034124	10.418688	35
26	9.581618	9.965824	9.615793	10.384207	10.034176	10.418382	34
27	9.581924	9.965772	9.616151	10.383849	10.034228	10.418076	33
28	9.582229	9.965720	9.616509	10.383491	10.034280	10.417771	32
29	9.582535	9.965668	9.616867	10.383133	10.034332	10.417465	31
30	9.582840	9.965615	9.617224	10.382776	10.034385	10.417160	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

112

Degrees 67

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	309.	52.	360	10.	51.	9.	60	5.	26.	4.	30
50.	257.	43.	300	9.	46.	8.	54	4.	21.	3.	24
40.	206.	34.	240	8.	41.	7.	48	3.	15.	3.	18
30.	154.	26.	180	7.	36.	6.	42	2.	10.	2.	12
20.	103.	17.	120	6.	31.	5.	36	1.	5.	1.	6
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

97

22 Degrees.							157
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.583840	9.965615	9.617224	10.382776	10.034385	10.417169	30
31	9.583245	9.965563	9.617582	10.382418	10.034437	10.416855	29
32	9.583449	9.965511	9.617939	10.382061	10.034489	10.416551	28
33	9.583754	9.965458	9.618295	10.381705	10.034542	10.416246	27
34	9.584058	9.965406	9.618652	10.381348	10.034594	10.415942	26
35	9.584361	9.965353	9.619008	10.380992	10.034647	10.415639	25
36	9.584665	9.965301	9.619364	10.380636	10.034699	10.415335	24
37	9.584968	9.965248	9.619720	10.380280	10.034752	10.415032	23
38	9.585272	9.965195	9.620076	10.379924	10.034805	10.414728	22
39	9.585574	9.965143	9.620432	10.379568	10.034857	10.414426	21
40	9.585877	9.965090	9.620787	10.379213	10.034910	10.414123	20
41	9.586179	9.965037	9.621142	10.378858	10.034963	10.413821	19
42	9.586482	9.964984	9.621497	10.378503	10.035016	10.413518	18
43	9.586783	9.964931	9.621852	10.378148	10.035069	10.413217	17
44	9.587085	9.964879	9.622207	10.377793	10.035121	10.412915	16
45	9.587386	9.964826	9.622561	10.377439	10.035174	10.412614	15
46	9.587688	9.964773	9.622915	10.377085	10.035227	10.412312	14
47	9.587989	9.964720	9.623269	10.376731	10.035280	10.412011	13
48	9.588289	9.964666	9.623623	10.376377	10.035334	10.411711	12
49	9.588590	9.964613	9.623976	10.376024	10.035387	10.411410	11
50	9.588890	9.964560	9.624330	10.375670	10.035440	10.411110	10
51	9.589190	9.964507	9.624683	10.375317	10.035493	10.410810	9
52	9.589489	9.964454	9.625036	10.374964	10.035546	10.410511	8
53	9.589789	9.964400	9.625388	10.374612	10.035600	10.410211	7
54	9.590088	9.964347	9.625741	10.374259	10.035653	10.409912	6
55	9.590387	9.964294	9.626093	10.373907	10.035706	10.409613	5
56	9.590686	9.964240	9.626445	10.373555	10.035760	10.409314	4
57	9.590984	9.964187	9.626797	10.373203	10.035813	10.409016	3
58	9.591282	9.964133	9.627149	10.372851	10.035867	10.408718	2
59	9.591580	9.964080	9.627501	10.372499	10.035920	10.408420	1
60	9.591879	9.964026	9.627852	10.372148	10.035974	10.408122	0

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
112							Degrees 67

"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.
60.	301.	53.	354	10.	50.	9.	59	5.	25.	4.	30
50.	251.	44.	295	9.	45.	8.	53	4.	20.	4.	24
40.	201.	35.	236	8.	40.	7.	47	3.	15.	3.	18
30.	151.	27.	177	7.	35.	6.	41	2.	10.	2.	12
20.	100.	18.	118	6.	30.	5.	35	1.	5.	1.	6
	Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.

63 Degrees.							156
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.591878	9.964026	9.627852	10.372148	10.035974	10.408122	60
1	9.592176	9.963972	9.628203	10.371797	10.036028	10.407824	59
2	9.592473	9.963919	9.628554	10.371446	10.036081	10.407527	58
3	9.592770	9.963865	9.628905	10.371095	10.036135	10.407230	57
4	9.593067	9.963811	9.629255	10.370745	10.036189	10.406933	56
5	9.593363	9.963757	9.629606	10.370394	10.036243	10.406637	55
6	9.593659	9.963704	9.629956	10.370044	10.036296	10.406341	54
7	9.593955	9.963650	9.630306	10.369694	10.036350	10.406045	53
8	9.594251	9.963596	9.630656	10.369344	10.036404	10.405749	52
9	9.594547	9.963542	9.631005	10.368995	10.036458	10.405453	51
10	9.594842	9.963488	9.631355	10.368645	10.036512	10.405158	50
11	9.595137	9.963434	9.631704	10.368296	10.036566	10.404862	49
12	9.595432	9.963379	9.632053	10.367947	10.036621	10.404568	48
13	9.595727	9.963325	9.632402	10.367598	10.036675	10.404273	47
14	9.596021	9.963271	9.632750	10.367250	10.036729	10.403979	46
15	9.596315	9.963217	9.633099	10.366901	10.036783	10.403685	45
16	9.596609	9.963163	9.633447	10.366553	10.036837	10.403391	44
17	9.596903	9.963108	9.633795	10.366205	10.036892	10.403097	43
18	9.597196	9.963054	9.634143	10.365857	10.036946	10.402804	42
19	9.597490	9.962999	9.634490	10.365510	10.037001	10.402510	41
20	9.597783	9.962945	9.634838	10.365162	10.037055	10.402217	40
21	9.598075	9.962890	9.635185	10.364815	10.037110	10.401925	39
22	9.598368	9.962836	9.635532	10.364468	10.037164	10.401632	38
23	9.598660	9.962781	9.635879	10.364121	10.037219	10.401340	37
24	9.598952	9.962727	9.636226	10.363774	10.037273	10.401048	36
25	9.599244	9.962672	9.636572	10.363428	10.037328	10.400756	35
26	9.599536	9.962617	9.636919	10.363081	10.037383	10.400464	34
27	9.599827	9.962562	9.637265	10.362735	10.037438	10.400173	33
28	9.600118	9.962508	9.637611	10.362389	10.037492	10.399882	32
29	9.600409	9.962453	9.637956	10.362044	10.037547	10.399591	31
30	9.600700	9.962398	9.638302	10.361698	10.037602	10.399300	30

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
113							Degrees 66
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang."
60.	294.	54.	348	10.	49.	9.	58
50.	245.	45.	290	9.	44.	8.	52
40.	196.	36.	232	8.	39.	7.	46
30.	147.	27.	174	7.	34.	6.	41
20.	98.	18.	116	6.	29.	5.	35
Co-fi.	Sine.	Tang.	Co-fi.	Sine.	Tang.	Co-fi.	Sine.
5.	24.	5.	29	5.	24.	5.	29
4.	20.	4.	23	4.	20.	4.	23
3.	15.	3.	17	3.	15.	3.	17
2.	10.	2.	12	2.	10.	2.	12
1.	5.	1.	6	1.	5.	1.	6

23 Degrees.							156
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	Min.
30	9.600700	9.962398	9.638302	10.361698	10.037602	10.399300	30
31	9.600990	9.962343	9.638647	10.361353	10.037657	10.399010	29
32	9.601280	9.962288	9.638992	10.361008	10.037712	10.398720	28
33	9.601570	9.962233	9.639337	10.360663	10.037767	10.398430	27
34	9.601860	9.962178	9.639682	10.360318	10.037822	10.398140	26
35	9.602150	9.962123	9.640027	10.359973	10.037877	10.397850	25
36	9.602439	9.962067	9.640371	10.359629	10.037933	10.397561	24
37	9.602728	9.962012	9.640716	10.359284	10.037988	10.397272	23
38	9.603017	9.961957	9.641060	10.358940	10.038043	10.396983	22
39	9.603305	9.961902	9.641404	10.358596	10.038098	10.396695	21
40	9.603594	9.961846	9.641747	10.358253	10.038154	10.396406	20
41	9.603882	9.961791	9.642091	10.357909	10.038209	10.396118	19
42	9.604170	9.961735	9.642434	10.357566	10.038265	10.395830	18
43	9.604457	9.961680	9.642777	10.357223	10.038320	10.395543	17
44	9.604745	9.961624	9.643120	10.356880	10.038376	10.395255	16
45	9.605032	9.961569	9.643463	10.356537	10.038431	10.394968	15
46	9.605319	9.961513	9.643806	10.356194	10.038487	10.394681	14
47	9.605606	9.961458	9.644148	10.355852	10.038542	10.394394	13
48	9.605892	9.961402	9.644490	10.355510	10.038598	10.394108	12
49	9.606179	9.961346	9.644832	10.355168	10.038654	10.393821	11
50	9.606465	9.961290	9.645174	10.354826	10.038710	10.393535	10
51	9.606751	9.961235	9.645516	10.354484	10.038765	10.393249	9
52	9.607036	9.961179	9.645857	10.354143	10.038821	10.392964	8
53	9.607322	9.961123	9.646199	10.353801	10.038877	10.392678	7
54	9.607607	9.961067	9.646540	10.353460	10.038933	10.392393	6
55	9.607892	9.961011	9.646881	10.353119	10.038989	10.392108	5
56	9.608177	9.960955	9.647222	10.352778	10.039045	10.391823	4
57	9.608461	9.960899	9.647562	10.352438	10.039101	10.391539	3
58	9.608745	9.960843	9.647903	10.352097	10.039157	10.391255	2
59	9.609029	9.960786	9.648243	10.351757	10.039214	10.390971	1
60	9.609313	9.960730	9.648583	10.351417	10.039270	10.390687	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.

113

Degrees 66

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	287.	56.	343	10.	48.	9.	57	5.	24.	5.	29
50.	239.	46.	286	9.	43.	8.	52	4.	19.	4.	23
40.	191.	37.	229	8.	38.	7.	46	3.	14.	3.	17
30.	143.	28.	172	7.	33.	6.	40	2.	10.	2.	11
20.	96.	19.	115	6.	29.	6.	34	1.	5.	1.	6
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

24 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.609313	9.960730	9.648383	10.351417	10.039270	10.390687	60
1	9.609597	9.960674	9.648923	10.351077	10.039326	10.390403	59
2	9.609880	9.960618	9.649263	10.350737	10.039382	10.390120	58
3	9.610164	9.960561	9.649602	10.350398	10.039439	10.389836	57
4	9.610447	9.960505	9.649942	10.350058	10.039495	10.389553	56
5	9.610729	9.960448	9.650281	10.349719	10.039552	10.389271	55
6	9.611012	9.960392	9.650620	10.349380	10.039608	10.388988	54
7	9.611294	9.960335	9.650959	10.349041	10.039665	10.388706	53
8	9.611576	9.960279	9.651297	10.348703	10.039721	10.388424	52
9	9.611858	9.960222	9.651636	10.348364	10.039778	10.388142	51
10	9.612140	9.960165	9.651974	10.348026	10.039835	10.387860	50
11	9.612421	9.960109	9.652312	10.347688	10.039891	10.387579	49
12	9.612702	9.960052	9.652650	10.347350	10.039948	10.387298	48
13	9.612983	9.959995	9.652988	10.347012	10.040005	10.387017	47
14	9.613264	9.959938	9.653326	10.346674	10.040062	10.386736	46
15	9.613545	9.959882	9.653663	10.346337	10.040118	10.386455	45
16	9.613825	9.959825	9.654000	10.346000	10.040175	10.386175	44
17	9.614105	9.959768	9.654337	10.345663	10.040232	10.385895	43
18	9.614385	9.959711	9.654674	10.345326	10.040289	10.385615	42
19	9.614665	9.959654	9.655011	10.344989	10.040346	10.385335	41
20	9.614944	9.959596	9.655348	10.344652	10.040404	10.385056	40
21	9.615223	9.959539	9.655684	10.344316	10.040461	10.384777	39
22	9.615502	9.959482	9.656020	10.343980	10.040518	10.384498	38
23	9.615781	9.959425	9.656356	10.343644	10.040575	10.384219	37
24	9.616060	9.959368	9.656692	10.343308	10.040632	10.383940	36
25	9.616338	9.959310	9.657028	10.342972	10.040690	10.383662	35
26	9.616616	9.959253	9.657364	10.342636	10.040747	10.383384	34
27	9.616894	9.959195	9.657699	10.342301	10.040805	10.383106	33
28	9.617172	9.959138	9.658034	10.341966	10.040862	10.382828	32
29	9.617450	9.959080	9.658369	10.341631	10.040920	10.382550	31
30	9.617727	9.959023	9.658704	10.341296	10.040977	10.382271	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

114

Degrees 65

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	280.	57.	337	10.	47.	9.	56	5.	23.	55.	28
50.	234.	47.	281	9.	42.	9.	51	4.	19.	44.	22
40.	187.	38.	225	8.	37.	8.	45	3.	14.	31.	17
30.	140.	28.	169	7.	33.	7.	39	2.	9.	21.	11
20.	93.	19.	112	6.	28.	6.	34	1.	5.	11.	6
Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

101

24 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.617727	9.959023	9.658704	10.341296	10.040977	10.382273	30
31	9.618004	9.958965	9.659039	10.340961	10.041035	10.381996	29
32	9.618281	9.958908	9.659373	10.340627	10.041092	10.381719	28
33	9.618558	9.958850	9.659708	10.340292	10.041150	10.381442	27
34	9.618834	9.958792	9.660042	10.339958	10.041208	10.381166	26
35	9.619110	9.958734	9.660376	10.339624	10.041266	10.380890	25
36	9.619386	9.958677	9.660710	10.339290	10.041323	10.380614	24
37	9.619662	9.958619	9.661043	10.338957	10.041381	10.380338	23
38	9.619938	9.958561	9.661377	10.338623	10.041439	10.380062	22
39	9.620213	9.958503	9.661710	10.338290	10.041497	10.379787	21
40	9.620488	9.958445	9.662043	10.337957	10.041555	10.379512	20
41	9.620763	9.958387	9.662376	10.337624	10.041613	10.379237	19
42	9.621038	9.958329	9.662709	10.337291	10.041671	10.378962	18
43	9.621313	9.958271	9.663042	10.336958	10.041729	10.378687	17
44	9.621587	9.958213	9.663375	10.336625	10.041787	10.378413	16
45	9.621861	9.958154	9.663707	10.336293	10.041846	10.378139	15
46	9.622135	9.958096	9.664039	10.335961	10.041904	10.377865	14
47	9.622409	9.958038	9.664371	10.335629	10.041962	10.377591	13
48	9.622682	9.957979	9.664703	10.335297	10.042021	10.377318	12
49	9.622956	9.957921	9.665035	10.334965	10.042079	10.377044	11
50	9.623229	9.957863	9.665366	10.334634	10.042137	10.376771	10
51	9.623502	9.957804	9.665698	10.334302	10.042196	10.376498	9
52	9.623774	9.957746	9.666029	10.333971	10.042254	10.376226	8
53	9.624047	9.957687	9.666360	10.333640	10.042313	10.375953	7
54	9.624319	9.957628	9.666691	10.333309	10.042372	10.375681	6
55	9.624591	9.957570	9.667021	10.332979	10.042430	10.375409	5
56	9.624863	9.957511	9.667352	10.332648	10.042489	10.375137	4
57	9.625135	9.957452	9.667682	10.332318	10.042548	10.374865	3
58	9.625406	9.957393	9.668013	10.331987	10.042607	10.374594	2
59	9.625677	9.957335	9.668343	10.331657	10.042665	10.374323	1
60	9.625948	9.957276	9.668673	10.331327	10.042724	10.374052	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

114

Degrees 65

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	274.	58.	332	10.	46.	10.	57	5.	23.	5.	28
50.	228.	49.	277	9.	41.	9.	50	4.	18.	4.	22
40.	183.	39.	221	8.	37.	8.	44	3.	14.	3.	17
30.	137.	29.	166	7.	32.	7.	39	2.	9.	2.	11
20.	91.	19.	111	6.	27.	6.	33	1.	5.	1.	6
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

25 Degrees,

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.625948	9.957276	9.668673	10.331327	10.042724	10.374052	60
1	9.626219	9.957217	9.669002	10.330998	10.042783	10.373781	59
2	9.626490	9.957158	9.669332	10.330668	10.042842	10.373510	58
3	9.626760	9.957099	9.669661	10.330339	10.042901	10.373240	57
4	9.627030	9.957040	9.669991	10.330009	10.042960	10.372970	56
5	9.627300	9.956981	9.670320	10.329680	10.043019	10.372700	55
6	9.627570	9.956921	9.670649	10.329351	10.043079	10.372430	54
7	9.627840	9.956862	9.670977	10.329033	10.043138	10.372160	53
8	9.628109	9.956803	9.671306	10.328694	10.043197	10.371891	52
9	9.628378	9.956744	9.671635	10.328365	10.043256	10.371622	51
10	9.628647	9.956684	9.671963	10.328037	10.043316	10.371353	50
11	9.628916	9.956625	9.672291	10.327709	10.043375	10.371084	49
12	9.629185	9.956566	9.672619	10.327381	10.043434	10.370815	48
13	9.629453	9.956506	9.672947	10.327053	10.043494	10.370547	47
14	9.629721	9.956447	9.673274	10.326726	10.043553	10.370279	46
15	9.629989	9.956387	9.673602	10.326398	10.043613	10.370011	45
16	9.630257	9.956327	9.673929	10.326071	10.043673	10.369743	44
17	9.630524	9.956268	9.674257	10.325743	10.043732	10.369476	43
18	9.630792	9.956208	9.674584	10.325416	10.043792	10.369208	42
19	9.631059	9.956148	9.674911	10.325089	10.043852	10.368941	41
20	9.631326	9.956089	9.675237	10.324763	10.043911	10.368674	40
21	9.631593	9.956029	9.675564	10.324436	10.043971	10.368407	39
22	9.631859	9.955969	9.675890	10.324110	10.044031	10.368141	38
23	9.632125	9.955909	9.676217	10.323783	10.044091	10.367875	37
24	9.632392	9.955849	9.676543	10.323457	10.044151	10.367608	36
25	9.632658	9.955789	9.676869	10.323131	10.044211	10.367342	35
26	9.632923	9.955729	9.677194	10.322806	10.044271	10.367077	34
27	9.633189	9.955669	9.677520	10.322480	10.044331	10.366811	33
28	9.633454	9.955609	9.677846	10.322154	10.044391	10.366546	32
29	9.633719	9.955548	9.678171	10.321829	10.044452	10.366281	31
30	9.633984	9.955488	9.678496	10.321504	10.044512	10.366016	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

115

Degrees 64

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	268.	60.	327	10.	45.	10.	55	5.	22.	5.	27
50.	223.	50.	273	9.	40.	9.	49	4.	18.	4.	22
40.	179.	40.	218	8.	36.	8.	44	3.	13.	3.	16
30.	134.	30.	164	7.	31.	7.	38	2.	9.	2.	11
20.	89.	20.	109	6.	27.	6.	33	1.	4.	1.	6
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

103

25 Degrees.

134

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	0. Co-ar.	Min.
30	9.633984	9.955488	9.678496	10.321504	10.044512	10.366016		30
31	9.634249	9.955428	9.678821	10.321779	10.044572	10.365751		29
32	9.634514	9.955368	9.679146	10.322054	10.044632	10.365486		28
33	9.634778	9.955307	9.679471	10.322329	10.044693	10.365222		27
34	9.635042	9.955247	9.679795	10.322605	10.044753	10.364958		26
35	9.635306	9.955186	9.680120	10.319880	10.044814	10.364694		25
36	9.635570	9.955126	9.680444	10.319556	10.044874	10.364430		24
37	9.635834	9.955065	9.680768	10.319232	10.044935	10.364166		23
38	9.636097	9.955005	9.681092	10.318908	10.044995	10.363903		22
39	9.636360	9.954944	9.681416	10.318584	10.045056	10.363640		21
40	9.636623	9.954883	9.681740	10.318260	10.045117	10.363377		20
41	9.636886	9.954823	9.682063	10.317937	10.045177	10.363114		19
42	9.637148	9.954762	9.682387	10.317613	10.045238	10.362852		18
43	9.637411	9.954701	9.682710	10.317290	10.045299	10.362589		17
44	9.637673	9.954640	9.683033	10.316967	10.045360	10.362327		16
45	9.637935	9.954579	9.683356	10.316645	10.045421	10.362065		15
46	9.638197	9.954518	9.683679	10.316321	10.045482	10.361803		14
47	9.638458	9.954457	9.684001	10.315999	10.045543	10.361541		13
48	9.638720	9.954396	9.684324	10.315676	10.045604	10.361280		12
49	9.638981	9.954335	9.684646	10.315354	10.045665	10.361019		11
50	9.639242	9.954274	9.684968	10.315032	10.045726	10.360758		10
51	9.639503	9.954213	9.685290	10.314710	10.045787	10.360497		9
52	9.639764	9.954152	9.685612	10.314388	10.045848	10.360236		8
53	9.640024	9.954090	9.685934	10.314066	10.045910	10.359976		7
54	9.640284	9.954029	9.686255	10.313745	10.045971	10.359716		6
55	9.640544	9.953968	9.686577	10.313423	10.046032	10.359456		5
56	9.640804	9.953906	9.686898	10.313102	10.046094	10.359196		4
57	9.641064	9.953845	9.687219	10.312781	10.046155	10.358936		3
58	9.641324	9.953783	9.687540	10.312460	10.046217	10.358676		2
59	9.641583	9.953722	9.687861	10.312139	10.046278	10.358417		1
60	9.641842	9.953660	9.688182	10.311818	10.046340	10.358158		0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	0. Co-ar.	Min.

Degrees 64

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	262.	61.	323	10.	44.	10.	54	5.	22.	5.	27
50.	218.	51.	269	9.	39.	9.	48	4.	17.	4.	22
40.	175.	41.	215	8.	35.	8.	43	3.	13.	3.	16
30.	131.	30.	161	7.	31.	7.	38	2.	9.	2.	11
20.	87.	20.	108	6.	26.	6.	32	1.	4.	1.	5
Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.	

26 Degrees.							153
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.641842	9.953660	9.688182	10.311818	10.046340	10.358158	60
1	9.642101	9.953599	9.688502	10.311498	10.046401	10.357899	59
2	9.642360	9.953537	9.688823	10.311177	10.046463	10.357640	58
3	9.642618	9.953475	9.689143	10.310857	10.046525	10.357382	57
4	9.642877	9.953413	9.689463	10.310537	10.046587	10.357123	56
5	9.643135	9.953352	9.689783	10.310217	10.046648	10.356865	55
6	9.643393	9.953290	9.690103	10.309897	10.046710	10.356607	54
7	9.643650	9.953228	9.690423	10.309577	10.046772	10.356350	53
8	9.643908	9.953166	9.690742	10.309258	10.046834	10.356092	52
9	9.644165	9.953104	9.691062	10.308938	10.046896	10.355835	51
10	9.644423	9.953042	9.691381	10.308619	10.046958	10.355577	50
11	9.644680	9.952980	9.691700	10.308300	10.047020	10.355320	49
12	9.644936	9.952918	9.692019	10.307981	10.047082	10.355064	48
13	9.645193	9.952855	9.692338	10.307662	10.047145	10.354807	47
14	9.645450	9.952793	9.692656	10.307344	10.047207	10.354550	46
15	9.645706	9.952731	9.692975	10.307025	10.047269	10.354294	45
16	9.645962	9.952669	9.693293	10.306707	10.047331	10.354038	44
17	9.646218	9.952606	9.693612	10.306388	10.047394	10.353782	43
18	9.646474	9.952544	9.693930	10.306070	10.047456	10.353526	42
19	9.646729	9.952481	9.694248	10.305752	10.047519	10.353271	41
20	9.646984	9.952419	9.694566	10.305434	10.047581	10.353016	40
21	9.647240	9.952356	9.694883	10.305117	10.047644	10.352760	39
22	9.647494	9.952294	9.695201	10.304799	10.047706	10.352506	38
23	9.647749	9.952231	9.695518	10.304482	10.047769	10.352251	37
24	9.648004	9.952168	9.695836	10.304164	10.047832	10.351996	36
25	9.648258	9.952106	9.696153	10.303847	10.047894	10.351742	35
26	9.648512	9.952043	9.696470	10.303530	10.047957	10.351488	34
27	9.648766	9.951980	9.696787	10.303213	10.048020	10.351234	33
28	9.649020	9.951917	9.697103	10.302897	10.048083	10.350980	32
29	9.649274	9.951854	9.697420	10.302580	10.048146	10.350726	31
30	9.649527	9.951791	9.697736	10.302264	10.048209	10.350473	30
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.
60.	256.	62.	318	10.	43.	10.	53	5.	21.	5.	27
50.	213.	52.	265	9.	38.	9.	48	4.	17.	4.	21
40.	171.	42.	212	8.	34.	8.	42	3.	13.	3.	16
30.	128.	31.	159	7.	30.	7.	37	2.	9.	2.	11
20.	85.	21.	106	6.	27.	6.	32	1.	4.	1.	5
Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.	

Log. Sines, Tangents, Secants, &c.

105

26 Degrees.

153

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.649527	9.951791	9.697736	10.302264	10.048209	10.350473	30
31	9.649781	9.951728	9.698053	10.301947	10.048272	10.350219	29
32	9.650034	9.951665	9.698369	10.301631	10.048335	10.349966	28
33	9.650287	9.951602	9.698685	10.301315	10.048398	10.349713	27
34	9.650539	9.951539	9.699001	10.300999	10.048461	10.349461	26
35	9.650792	9.951476	9.699316	10.300684	10.048524	10.349208	25
36	9.651044	9.951412	9.699632	10.300368	10.048588	10.348956	24
37	9.651297	9.951349	9.699947	10.300053	10.048651	10.348703	23
38	9.651549	9.951286	9.700263	10.299737	10.048714	10.348451	22
39	9.651800	9.951222	9.700578	10.299422	10.048778	10.348200	21
40	9.652052	9.951159	9.700893	10.299107	10.048841	10.347948	20
41	9.652304	9.951096	9.701208	10.298792	10.048904	10.347696	19
42	9.652555	9.951032	9.701523	10.298477	10.048968	10.347445	18
43	9.652806	9.950968	9.701837	10.298163	10.049032	10.347194	17
44	9.653057	9.950905	9.702152	10.297848	10.049095	10.346943	16
45	9.653308	9.950841	9.702466	10.297534	10.049159	10.346692	15
46	9.653558	9.950778	9.702781	10.297219	10.049222	10.346442	14
47	9.653808	9.950714	9.703095	10.296905	10.049286	10.346192	13
48	9.654059	9.950650	9.703409	10.296591	10.049350	10.345941	12
49	9.654309	9.950586	9.703722	10.296278	10.049414	10.345691	11
50	9.654558	9.950522	9.704036	10.295964	10.049478	10.345442	10
51	9.654808	9.950458	9.704350	10.295650	10.049542	10.345192	9
52	9.655058	9.950394	9.704663	10.295337	10.049606	10.344942	8
53	9.655307	9.950330	9.704976	10.295024	10.049670	10.344693	7
54	9.655556	9.950266	9.705290	10.294710	10.049734	10.344444	6
55	9.655805	9.950202	9.705603	10.294397	10.049798	10.344195	5
56	9.656054	9.950138	9.705916	10.294084	10.049862	10.343946	4
57	9.656302	9.950074	9.706228	10.293772	10.049926	10.343698	3
58	9.656551	9.950010	9.706541	10.293459	10.049990	10.343449	2
59	9.656799	9.949945	9.706854	10.293146	10.050055	10.343201	1
60	9.657047	9.949881	9.707166	10.292834	10.050119	10.342953	0
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

116

Degrees 63

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	251.	64.	314	10.	42.	11.	52	5.	21.	5.	26
50.	209.	53.	262	9.	38.	10.	47	4.	17.	4.	21
40.	167.	42.	209	8.	33.	8.	42	3.	13.	3.	16
30.	125.	32.	157	7.	29.	7.	37	2.	8.	2.	10
20.	84.	21.	105	6.	25.	6.	31	1.	4.	1.	5
Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.	

27 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.657047	9.949881	9.707166	10.292834	10.050119	10.342953	60
1	9.657295	9.949816	9.707478	10.292522	10.050184	10.342705	59
2	9.657542	9.949752	9.707790	10.292210	10.050248	10.342458	58
3	9.657790	9.949688	9.708102	10.291898	10.050312	10.342210	57
4	9.658037	9.949623	9.708414	10.291586	10.050377	10.341963	56
5	9.658284	9.949558	9.708726	10.291274	10.050442	10.341716	55
6	9.658531	9.949494	9.709037	10.290963	10.050506	10.341469	54
7	9.658778	9.949429	9.709349	10.290651	10.050571	10.341222	53
8	9.659025	9.949364	9.709660	10.290340	10.050636	10.340975	52
9	9.659271	9.949300	9.709971	10.290029	10.050700	10.340729	51
10	9.659517	9.949235	9.710282	10.289718	10.050765	10.340483	50
11	9.659763	9.949170	9.710593	10.289407	10.050830	10.340237	49
12	9.660009	9.949105	9.710904	10.289096	10.050895	10.339991	48
13	9.660255	9.949040	9.711215	10.288785	10.050960	10.339745	47
14	9.660501	9.948975	9.711525	10.288475	10.051025	10.339499	46
15	9.660746	9.948910	9.711836	10.288164	10.051090	10.339254	45
16	9.660991	9.948845	9.712146	10.287854	10.051155	10.339009	44
17	9.661236	9.948780	9.712456	10.287544	10.051220	10.338764	43
18	9.661481	9.948715	9.712766	10.287234	10.051285	10.338519	42
19	9.661726	9.948650	9.713076	10.286924	10.051350	10.338274	41
20	9.661970	9.948584	9.713386	10.286614	10.051416	10.338030	40
21	9.662214	9.948519	9.713696	10.286304	10.051481	10.337786	39
22	9.662459	9.948454	9.714005	10.285995	10.051546	10.337541	38
23	9.662703	9.948388	9.714314	10.285686	10.051612	10.337297	37
24	9.662946	9.948323	9.714624	10.285376	10.051677	10.337054	36
25	9.663190	9.948257	9.714933	10.285067	10.051743	10.336810	35
26	9.663433	9.948192	9.715242	10.284758	10.051808	10.336567	34
27	9.663677	9.948126	9.715551	10.284449	10.051874	10.336323	33
28	9.663920	9.948060	9.715860	10.284140	10.051940	10.336080	32
29	9.664163	9.947995	9.716168	10.283832	10.052005	10.335837	31
30	9.664406	9.947929	9.716477	10.283523	10.052071	10.335594	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

117

Degrees 62

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	245.	65.	310	10.	41.	11.	52	5.	20.	5.	26
50.	204.	54.	259	9.	37.	10.	47	4.	16.	4.	21
40.	163.	43.	207	8.	33.	9.	41	3.	12.	3.	16
30.	123.	33.	155	7.	29.	8.	36	2.	8.	2.	10
20.	82.	22.	103	6.	27.	7.	31	1.	4.	1.	5
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

107

27 Degrees.							152
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	Min.
30	9.664406	9.947929	9.716477	10.283523	10.052071	10.335594	30
31	9.664648	9.947863	9.716783	10.283215	10.052137	10.335352	29
32	9.664891	9.947797	9.717093	10.282907	10.052203	10.335109	28
33	9.665133	9.947731	9.717401	10.282599	10.052269	10.334867	27
34	9.665375	9.947665	9.717709	10.282291	10.052335	10.334625	26
35	9.665617	9.947600	9.718017	10.281983	10.052400	10.334383	25
36	9.665859	9.947533	9.718325	10.281675	10.052467	10.334141	24
37	9.666100	9.947467	9.718633	10.281367	10.052533	10.333900	23
38	9.666342	9.947401	9.718940	10.281060	10.052599	10.333658	22
39	9.666583	9.947335	9.719248	10.280752	10.052665	10.333417	21
40	9.666824	9.947269	9.719555	10.280445	10.052731	10.333176	20
41	9.667065	9.947203	9.719862	10.280138	10.052797	10.332935	19
42	9.667305	9.947136	9.720169	10.279831	10.052864	10.332695	18
43	9.667546	9.947070	9.720476	10.279524	10.052930	10.332454	17
44	9.667786	9.947004	9.720783	10.279217	10.052996	10.332214	16
45	9.668027	9.946937	9.721089	10.278911	10.053063	10.331973	15
46	9.668267	9.946871	9.721396	10.278604	10.053129	10.331733	14
47	9.668506	9.946804	9.721702	10.278298	10.053196	10.331494	13
48	9.668746	9.946738	9.722009	10.277991	10.053262	10.331254	12
49	9.668986	9.946671	9.722315	10.277685	10.053329	10.331014	11
50	9.669225	9.946604	9.722621	10.277379	10.053396	10.330775	10
51	9.669464	9.946538	9.722927	10.277073	10.053462	10.330536	9
52	9.669703	9.946471	9.723232	10.276768	10.053529	10.330297	8
53	9.669942	9.946404	9.723538	10.276462	10.053596	10.330058	7
54	9.670181	9.946337	9.723844	10.276156	10.053663	10.329819	6
55	9.670419	9.946270	9.724149	10.275851	10.053730	10.329581	5
56	9.670658	9.946203	9.724454	10.275546	10.053797	10.329342	4
57	9.670896	9.946136	9.724760	10.275240	10.053864	10.329104	3
58	9.671134	9.946069	9.725065	10.274935	10.053931	10.328866	2
59	9.671372	9.946002	9.725370	10.274630	10.053998	10.328628	1
60	9.671609	9.945935	9.725674	10.274326	10.054065	10.328391	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
							q. Co-ar.

117

Degrees 62

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	240.	66.	306	10.	40.	11.	51	5.	22.	6.	26
50.	220.	55.	255	9.	36.	10.	46	4.	16.	4.	20
40.	180.	44.	204	8.	32.	9.	41	3.	12.	3.	15
30.	120.	33.	153	7.	28.	8.	36	2.	8.	2.	10
20.	80.	22.	102	6.	24.	7.	31	1.	4.	1.	5
Co-fi.			Sine.	Tang.			Co-fi.	Sine.			Tang.

28 Degrees.							29 Degrees.	
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	0. Co-ar.	Min.
0	9.671609	9.945935	9.725674	10.274326	10.054065	10.328391	60	0
1	9.671847	9.945868	9.725979	10.274021	10.054132	10.328153	59	1
2	9.672084	9.945800	9.726284	10.273716	10.054200	10.327916	58	2
3	9.672321	9.945733	9.726588	10.273412	10.054267	10.327679	57	3
4	9.672558	9.945666	9.726893	10.273108	10.054334	10.327442	56	4
5	9.672795	9.945598	9.727197	10.272803	10.054402	10.327205	55	5
6	9.673032	9.945531	9.727501	10.272499	10.054469	10.326968	54	6
7	9.673268	9.945464	9.727805	10.272195	10.054536	10.326732	53	7
8	9.673505	9.945396	9.728109	10.271891	10.054604	10.326495	52	8
9	9.673741	9.945328	9.728412	10.271588	10.054672	10.326259	51	9
10	9.673977	9.945261	9.728716	10.271284	10.054739	10.326023	50	10
11	9.674213	9.945193	9.729020	10.270980	10.054807	10.325787	49	11
12	9.674448	9.945125	9.729323	10.270677	10.054875	10.325552	48	12
13	9.674684	9.945058	9.729626	10.270374	10.054942	10.325316	47	13
14	9.674919	9.944990	9.729929	10.270071	10.055010	10.325081	46	14
15	9.675155	9.944922	9.730233	10.269767	10.055078	10.324845	45	15
16	9.675390	9.944854	9.730535	10.269465	10.055146	10.324610	44	16
17	9.675624	9.944786	9.730838	10.269162	10.055214	10.324376	43	17
18	9.675859	9.944718	9.731141	10.268859	10.055282	10.324141	42	18
19	9.676094	9.944650	9.731444	10.268556	10.055350	10.323906	41	19
20	9.676328	9.944582	9.731746	10.268254	10.055418	10.323672	40	20
21	9.676563	9.944514	9.732048	10.267952	10.055486	10.323438	39	21
22	9.676796	9.944446	9.732351	10.267649	10.055554	10.323204	38	22
23	9.677030	9.944377	9.732653	10.267347	10.055623	10.322970	37	23
24	9.677264	9.944309	9.732955	10.267045	10.055691	10.322736	36	24
25	9.677498	9.944241	9.733257	10.266743	10.055759	10.322502	35	25
26	9.677731	9.944172	9.733558	10.266442	10.055828	10.322269	34	26
27	9.677964	9.944104	9.733860	10.266140	10.055896	10.322036	33	27
28	9.678197	9.944036	9.734162	10.265838	10.055964	10.321803	32	28
29	9.678430	9.943967	9.734463	10.265537	10.056033	10.321570	31	29
30	9.678663	9.943899	9.734764	10.265236	10.056101	10.321337	30	30

118

Degrees 61

<i>n</i>	Sine.	<i>Co-fi.</i>	Tang.	<i>n</i>	Sine.	<i>Co-fi.</i>	Tang.	<i>n</i>	Sine.	<i>Co-fi.</i>	Tang.	<i>n</i>	Sine.	<i>Co-fi.</i>	Tang.
60.	235.	68.	303	10.	39.	11.	50	5.	20.	6.	25				
50.	196.	58.	252	9.	35.	10.	45	4.	16.	5.	20				
40.	157.	45.	202	8.	31.	9.	40	3.	12.	3.	15				
30.	118.	34.	151	7.	27.	8.	35	2.	8.	2.	10				
20.	78.	23.	101	6.	23.	7.	30	1.	4.	1.	5				
	<i>Co-fi.</i>	Sine.	Tang.		<i>Co-fi.</i>	Sine.	Tang.		<i>Co-fi.</i>	Sine.	Tang.				

28 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.678663	9.943899	9.734764	10.265236	10.056101	10.321337	30
31	9.678895	9.943830	9.735066	10.264934	10.056170	10.321105	29
32	9.679128	9.943761	9.735367	10.264633	10.056239	10.320872	28
33	9.679360	9.943693	9.735668	10.264332	10.056307	10.320640	27
34	9.679592	9.943624	9.735969	10.264031	10.056376	10.320408	26
35	9.679824	9.943555	9.736269	10.263731	10.056445	10.320176	25
36	9.680056	9.943486	9.736570	10.263430	10.056514	10.319944	24
37	9.680288	9.943417	9.736870	10.263130	10.056583	10.319712	23
38	9.680519	9.943348	9.737171	10.262829	10.056652	10.319481	22
39	9.680750	9.943279	9.737471	10.262529	10.056721	10.319250	21
40	9.680982	9.943210	9.737771	10.262229	10.056790	10.319018	20
41	9.681213	9.943141	9.738071	10.261929	10.056859	10.318787	19
42	9.681443	9.943072	9.738371	10.261629	10.056928	10.318557	18
43	9.681674	9.943003	9.738671	10.261329	10.056997	10.318326	17
44	9.681905	9.942934	9.738971	10.261029	10.057066	10.318095	16
45	9.682135	9.942864	9.739271	10.260729	10.057136	10.317865	15
46	9.682365	9.942795	9.739570	10.260430	10.057205	10.317635	14
47	9.682595	9.942726	9.739870	10.260130	10.057274	10.317405	13
48	9.682825	9.942656	9.740169	10.259831	10.057344	10.317175	12
49	9.683055	9.942587	9.740468	10.259532	10.057413	10.316945	11
50	9.683284	9.942517	9.740767	10.259233	10.057483	10.316716	10
51	9.683514	9.942448	9.741066	10.258934	10.057552	10.316486	9
52	9.683743	9.942378	9.741365	10.258635	10.057622	10.316257	8
53	9.683972	9.942308	9.741664	10.258336	10.057692	10.316028	7
54	9.684201	9.942239	9.741962	10.258038	10.057761	10.315799	6
55	9.684430	9.942169	9.742261	10.257739	10.057831	10.315570	5
56	9.684658	9.942099	9.742559	10.257441	10.057901	10.315342	4
57	9.684887	9.942029	9.742858	10.257142	10.057971	10.315113	3
58	9.685115	9.941959	9.743156	10.256844	10.058041	10.314885	2
59	9.685343	9.941889	9.743454	10.256546	10.058111	10.314657	1
60	9.685571	9.941819	9.743752	10.256248	10.058181	10.314429	0
Min.	Ca-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

118

Degrees 61

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	230.	69.	300	10.	38.	12.	50	5.	19.	6.	25
50.	192.	58.	250	9.	34.	10.	45	4.	15.	5.	20
40.	153.	46.	200	8.	30.	9.	40	3.	12.	3.	15
30.	115.	35.	150	7.	26.	8.	35	2.	8.	2.	10
20.	77.	23.	100	6.	23.	7.	30	1.	4.	1.	5
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

110 Log. Sines, Tangents, Secants, &c.

29 Degrees.							150
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	Min.
0	9.685571	9.941819	9.743752	10.256248	10.058181	10.314429	60
1	9.685799	9.941749	9.744050	10.255950	10.058251	10.314201	59
2	9.686027	9.941679	9.744348	10.255652	10.058321	10.313973	58
3	9.686254	9.941609	9.744645	10.255355	10.058391	10.313746	57
4	9.686482	9.941539	9.744943	10.255057	10.058461	10.313518	56
5	9.686709	9.941469	9.745240	10.254760	10.058531	10.313291	55
6	9.686936	9.941398	9.745538	10.254462	10.058602	10.313064	54
7	9.687163	9.941328	9.745835	10.254165	10.058672	10.312837	53
8	9.687389	9.941258	9.746132	10.253868	10.058742	10.312611	52
9	9.687616	9.941187	9.746429	10.253571	10.058813	10.312384	51
10	9.687843	9.941117	9.746726	10.253274	10.058883	10.312157	50
11	9.688069	9.941046	9.747023	10.252977	10.058954	10.311931	49
12	9.688295	9.940975	9.747319	10.252681	10.059025	10.311705	48
13	9.688521	9.940905	9.747616	10.252384	10.059095	10.311479	47
14	9.688747	9.940834	9.747913	10.252087	10.059166	10.311253	46
15	9.688972	9.940763	9.748209	10.251791	10.059237	10.311028	45
16	9.689198	9.940693	9.748505	10.251495	10.059307	10.310802	44
17	9.689423	9.940622	9.748801	10.251199	10.059378	10.310577	43
18	9.689648	9.940551	9.749097	10.250903	10.059449	10.310352	42
19	9.689873	9.940480	9.749393	10.250607	10.059520	10.310127	41
20	9.690098	9.940409	9.749689	10.250311	10.059591	10.309902	40
21	9.690323	9.940338	9.749985	10.250015	10.059662	10.309677	39
22	9.690548	9.940267	9.750281	10.249719	10.059733	10.309452	38
23	9.690773	9.940196	9.750576	10.249424	10.059804	10.309228	37
24	9.690996	9.940125	9.750872	10.249128	10.059875	10.309004	36
25	9.691220	9.940054	9.751167	10.248833	10.059946	10.308780	35
26	9.691444	9.939982	9.751462	10.248538	10.060018	10.308556	34
27	9.691668	9.939911	9.751757	10.248243	10.060089	10.308332	33
28	9.691892	9.939840	9.752052	10.247948	10.060160	10.308108	32
29	9.692115	9.939768	9.752347	10.247653	10.060232	10.307885	31
30	9.692339	9.939697	9.752642	10.247358	10.060303	10.307661	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					0. Co-ar.		

119 Degrees 60

Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.	"
60.	226.	71.	296	10.	38.	12.	49	5.	19.	6.	25
50.	188.	59.	247	9.	33.	11.	44	4.	15.	5.	20
40.	150.	47.	198	8.	30.	9.	40	3.	11.	4.	15
30.	113.	35.	148	7.	26.	8.	35	2.	8.	2.	10
20.	75.	24.	99	6.	23.	7.	30	1.	4.	1.	5
Co-si. Sine. Tang.				Co-si. Sine Tang.				Co-si. Sine. Tang.			

Log. Sines, Tangents, Secants, &c.

111

29 Degrees.

150

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.692339	9.939697	9.752042	10.247358	10.060303	10.307661	30
31	9.692562	9.939625	9.752937	10.247063	10.060375	10.307438	29
32	9.692785	9.939554	9.753231	10.246769	10.060446	10.307215	28
33	9.693008	9.939482	9.753526	10.246474	10.060518	10.306992	27
34	9.693231	9.939410	9.753820	10.246180	10.060590	10.306769	26
35	9.693453	9.939339	9.754115	10.245885	10.060661	10.306547	25
36	9.693676	9.939267	9.754409	10.245591	10.060733	10.306324	24
37	9.693898	9.939195	9.754703	10.245297	10.060805	10.306102	23
38	9.694120	9.939123	9.754997	10.245003	10.060877	10.305880	22
39	9.694342	9.939052	9.755291	10.244709	10.060948	10.305658	21
40	9.694564	9.938980	9.755585	10.244415	10.061020	10.305436	20
41	9.694786	9.938908	9.755878	10.244122	10.061092	10.305214	19
42	9.695007	9.938836	9.756172	10.243828	10.061164	10.304993	18
43	9.695229	9.938763	9.756465	10.243535	10.061237	10.304771	17
44	9.695450	9.938691	9.756759	10.243241	10.061309	10.304550	16
45	9.695671	9.938619	9.757052	10.242948	10.061381	10.304329	15
46	9.695892	9.938547	9.757345	10.242655	10.061453	10.304108	14
47	9.696113	9.938475	9.757638	10.242362	10.061525	10.303887	13
48	9.696334	9.938402	9.757931	10.242069	10.061598	10.303666	12
49	9.696554	9.938330	9.758224	10.241776	10.061670	10.303446	11
50	9.696774	9.938258	9.758517	10.241483	10.061742	10.303225	10
51	9.696995	9.938185	9.758810	10.241190	10.061815	10.303003	9
52	9.697215	9.938113	9.759102	10.240898	10.061887	10.302782	8
53	9.697435	9.938040	9.759395	10.240605	10.061960	10.302561	7
54	9.697654	9.937967	9.759687	10.240313	10.062033	10.302340	6
55	9.697874	9.937895	9.759979	10.240021	10.062105	10.302126	5
56	9.698094	9.937822	9.760272	10.239728	10.062178	10.301906	4
57	9.698313	9.937749	9.760564	10.239436	10.062251	10.301687	3
58	9.698532	9.937676	9.760856	10.239144	10.062324	10.301468	2
59	9.698751	9.937604	9.761148	10.238852	10.062396	10.301249	1
60	9.698970	9.937531	9.761439	10.238561	10.062469	10.301030	0

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
------	----------	-------	----------	----------	--------------------------	---------	------

119

Degrees 60

"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.
60.	221.	72.	293	10.	37.	12.	49	5.	18.	6.	24
50.	184.	60.	244	9.	33.	11.	44	4.	15.	5.	20
40.	147.	48.	195	8.	29.	10.	39	3.	11.	4.	15
30.	110.	36.	147	7.	26.	8.	34	2.	7.	3.	10
20.	74.	24.	98	6.	22.	7.	29	1.	4.	2.	5
	Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.

30 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.698970	9.937531	9.761439	10.238561	10.062469	10.301030	60
1	9.699189	9.937458	9.761731	10.238269	10.062543	10.300811	59
2	9.699407	9.937385	9.762023	10.237977	10.062615	10.300593	58
3	9.699626	9.937312	9.762314	10.237686	10.062688	10.300374	57
4	9.699844	9.937238	9.762606	10.237394	10.062762	10.300156	56
5	9.700062	9.937165	9.762897	10.237103	10.062835	10.299938	55
6	9.700280	9.937092	9.763188	10.236812	10.062908	10.299720	54
7	9.700498	9.937019	9.763479	10.236521	10.062981	10.299502	53
8	9.700716	9.936946	9.763770	10.236230	10.063054	10.299284	52
9	9.700933	9.936872	9.764061	10.235939	10.063128	10.299067	51
10	9.701151	9.936799	9.764352	10.235648	10.063201	10.298849	50
11	9.701368	9.936725	9.764643	10.235357	10.063275	10.298632	49
12	9.701585	9.936652	9.764933	10.235067	10.063348	10.298415	48
13	9.701802	9.936578	9.765224	10.234776	10.063422	10.298198	47
14	9.702019	9.936505	9.765514	10.234486	10.063495	10.297981	46
15	9.702236	9.936431	9.765805	10.234195	10.063569	10.297764	45
16	9.702452	9.936357	9.766095	10.233905	10.063643	10.297548	44
17	9.702669	9.936284	9.766385	10.233615	10.063716	10.297331	43
18	9.702885	9.936210	9.766675	10.233325	10.063790	10.297115	42
19	9.703101	9.936136	9.766965	10.233035	10.063864	10.296899	41
20	9.703317	9.936062	9.767255	10.232745	10.063938	10.296683	40
21	9.703533	9.935988	9.767545	10.232455	10.064012	10.296467	39
22	9.703749	9.935914	9.767834	10.232166	10.064086	10.296251	38
23	9.703964	9.935840	9.768124	10.231876	10.064160	10.296036	37
24	9.704179	9.935766	9.768414	10.231586	10.064234	10.295821	36
25	9.704395	9.935692	9.768703	10.231297	10.064308	10.295605	35
26	9.704610	9.935618	9.768992	10.231008	10.064382	10.295390	34
27	9.704825	9.935543	9.769281	10.230719	10.064457	10.295175	33
28	9.705040	9.935469	9.769571	10.230429	10.064531	10.294960	32
29	9.705254	9.935395	9.769860	10.230140	10.064605	10.294746	31
30	9.705469	9.935320	9.770148	10.229852	10.064680	10.294531	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

120

Degrees 59

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	208.	77.	285	10.	35.	13.	47	5.	17.	6.	24
50.	173.	64.	237	9.	31.	11.	43	4.	14.	5.	19
40.	139.	51.	190	8.	28.	10.	38	3.	10.	4.	14
30.	104.	38.	142	7.	24.	9.	33	2.	7.	3.	10
20.	69.	25.	95	6.	21.	8.	28	1.	3.	1.	5
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, - Tangents, Secants, &c

113

30 Degrees.							149
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	Min.
30	9.705469	9.933320	9.770148	10.229852	10.064680	10.294531	30
31	9.705682	9.935246	9.770437	10.229563	10.064754	10.294317	29
32	9.705898	9.935171	9.770726	10.229274	10.064829	10.294102	28
33	9.706112	9.935097	9.771015	10.228985	10.064903	10.293888	27
34	9.706326	9.935023	9.771303	10.228697	10.064978	10.293674	26
35	9.706539	9.934948	9.771592	10.228408	10.065052	10.293461	25
36	9.706753	9.934873	9.771880	10.228120	10.065127	10.293247	24
37	9.706967	9.934798	9.772168	10.227832	10.065202	10.293033	23
38	9.707180	9.934723	9.772457	10.227543	10.065277	10.292820	22
39	9.707393	9.934649	9.772745	10.227255	10.065351	10.292607	21
40	9.707606	9.934574	9.773033	10.226967	10.065426	10.292394	20
41	9.707819	9.934499	9.773321	10.226679	10.065501	10.292181	19
42	9.708032	9.934424	9.773608	10.226392	10.065576	10.291968	18
43	9.708245	9.934349	9.773896	10.226104	10.065651	10.291755	17
44	9.708458	9.934274	9.774184	10.225816	10.065726	10.291542	16
45	9.708670	9.934199	9.774471	10.225529	10.065801	10.291330	15
46	9.708883	9.934123	9.774759	10.225241	10.065877	10.291118	14
47	9.709094	9.934048	9.775046	10.224954	10.065952	10.290906	13
48	9.709306	9.933973	9.775333	10.224667	10.066027	10.290694	12
49	9.709518	9.933898	9.775621	10.224379	10.066102	10.290482	11
50	9.709730	9.933822	9.775908	10.224092	10.066178	10.290270	10
51	9.709941	9.933747	9.776195	10.223805	10.066253	10.290059	9
52	9.710153	9.933671	9.776482	10.223518	10.066329	10.289847	8
53	9.710364	9.933596	9.776768	10.223232	10.066404	10.289635	7
54	9.710575	9.933520	9.777055	10.222945	10.066480	10.289423	6
55	9.710786	9.933445	9.777342	10.222658	10.066555	10.289212	5
56	9.710997	9.933369	9.777628	10.222372	10.066631	10.289003	4
57	9.711208	9.933293	9.777915	10.222085	10.066707	10.288792	3
58	9.711419	9.933217	9.778201	10.221799	10.066783	10.288581	2
59	9.711629	9.933141	9.778488	10.221512	10.066859	10.288371	1
60	9.711839	9.933066	9.778774	10.221226	10.066934	10.288161	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					o. Co-ar.		

120

Degrees 59

Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	
60.	212.	75.	288	10.	35.	13.	48	5.	18.	6.	24
50.	177.	63.	240	9.	32.	11.	43	4.	14.	5.	19
40.	142.	50.	192	8.	28.	10.	38	3.	11.	4.	14
30.	106.	38.	144	7.	25.	9.	34	2.	7.	3.	10
20.	71.	25.	96	6.	21.	8.	29	1.	4.	2.	5
Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.	

114 Log. Sines, Tangents, Secants, &c.

31 Degrees.

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.711839	9.933066	9.778774	10.221226	10.066934	10.288161	60
1	9.712050	9.932990	9.779060	10.220940	10.067010	10.287950	59
2	9.712260	9.932914	9.779346	10.220654	10.067086	10.287740	58
3	9.712469	9.932838	9.779632	10.220368	10.067162	10.287531	57
4	9.712679	9.932762	9.779918	10.220082	10.067238	10.287321	56
5	9.712889	9.932685	9.780203	10.219797	10.067315	10.287111	55
6	9.713098	9.932609	9.780489	10.219511	10.067391	10.286902	54
7	9.713308	9.932533	9.780775	10.219225	10.067467	10.286692	53
8	9.713517	9.932457	9.781060	10.218940	10.067543	10.286483	52
9	9.713726	9.932380	9.781346	10.218654	10.067620	10.286274	51
10	9.713935	9.932304	9.781631	10.218369	10.067696	10.286065	50
11	9.714144	9.932228	9.781916	10.218084	10.067772	10.285856	49
12	9.714352	9.932151	9.782201	10.217799	10.067849	10.285648	48
13	9.714561	9.932075	9.782486	10.217514	10.067925	10.285439	47
14	9.714769	9.931998	9.782771	10.217229	10.068002	10.285231	46
15	9.714978	9.931921	9.783056	10.216944	10.068079	10.285022	45
16	9.715186	9.931845	9.783341	10.216659	10.068155	10.284814	44
17	9.715394	9.931768	9.783626	10.216374	10.068232	10.284606	43
18	9.715602	9.931691	9.783910	10.216090	10.068309	10.284398	42
19	9.715809	9.931614	9.784195	10.215805	10.068386	10.284191	41
20	9.716017	9.931537	9.784479	10.215521	10.068463	10.283983	40
21	9.716224	9.931460	9.784764	10.215236	10.068540	10.283776	39
22	9.716432	9.931383	9.785048	10.214952	10.068617	10.283568	38
23	9.716639	9.931306	9.785332	10.214668	10.068694	10.283361	37
24	9.716846	9.931229	9.785616	10.214384	10.068771	10.283154	36
25	9.717053	9.931152	9.785900	10.214100	10.068848	10.282947	35
26	9.717259	9.931075	9.786184	10.213816	10.068925	10.282741	34
27	9.717466	9.930998	9.786468	10.213532	10.069002	10.282534	33
28	9.717673	9.930921	9.786752	10.213248	10.069079	10.282327	32
29	9.717879	9.930843	9.787036	10.212964	10.069157	10.282121	31
30	9.718085	9.930766	9.787319	10.212681	10.069234	10.281915	30
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

151 Degrees 58

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	208.	77.	285	10.	35.	13.	47	5.	17.	6.	24
50.	173.	64.	237	9.	31.	11.	43	4.	14.	5.	19
40.	139.	51.	190	8.	28.	10.	38	3.	10.	4.	14
30.	104.	38.	142	7.	24.	9.	33	2.	7.	3.	9
20.	69.	26.	95	6.	21.	8.	28	1.	3.	1.	5
Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.	

Log. Sines, Tangents, Secants, &c.

115

31 Degrees.							148
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.718085	9.930766	9.787319	10.212681	10.069234	10.281915	30
31	9.718291	9.930688	9.787603	10.212397	10.069312	10.281709	29
32	9.718497	9.930611	9.787886	10.212114	10.069389	10.281503	28
33	9.718703	9.930533	9.788170	10.211830	10.069467	10.281297	27
34	9.718909	9.930456	9.788453	10.211547	10.069544	10.281091	26
35	9.719114	9.930378	9.788736	10.211264	10.069622	10.280886	25
36	9.719320	9.930300	9.789019	10.210981	10.069700	10.280680	24
37	9.719525	9.930223	9.789302	10.210698	10.069777	10.280475	23
38	9.719730	9.930145	9.789585	10.210415	10.069855	10.280270	22
39	9.719935	9.930067	9.789868	10.210132	10.069933	10.280065	21
40	9.720140	9.929989	9.790151	10.209847	10.070011	10.279860	20
41	9.720345	9.929911	9.790434	10.209566	10.070089	10.279655	19
42	9.720549	9.929833	9.790716	10.209284	10.070167	10.279451	18
43	9.720754	9.929755	9.790999	10.209001	10.070245	10.279246	17
44	9.720958	9.929677	9.791281	10.208719	10.070323	10.279042	16
45	9.721162	9.929599	9.791563	10.208437	10.070401	10.278838	15
46	9.721366	9.929521	9.791846	10.208154	10.070479	10.278634	14
47	9.721570	9.929442	9.792128	10.207872	10.070558	10.278430	13
48	9.721774	9.929364	9.792410	10.207590	10.070636	10.278226	12
49	9.721978	9.929286	9.792692	10.207308	10.070714	10.278022	11
50	9.722181	9.929207	9.792974	10.207026	10.070793	10.277819	10
51	9.722385	9.929129	9.793256	10.206744	10.070871	10.277615	9
52	9.722588	9.929050	9.793538	10.206462	10.070950	10.277412	8
53	9.722791	9.928972	9.793819	10.206180	10.071028	10.277209	7
54	9.722994	9.928893	9.794101	10.205899	10.071107	10.277006	6
55	9.723197	9.928815	9.794383	10.205617	10.071185	10.276803	5
56	9.723400	9.928736	9.794664	10.205336	10.071264	10.276600	4
57	9.723603	9.928657	9.794946	10.205054	10.071343	10.276397	3
58	9.723805	9.928578	9.795227	10.204773	10.071422	10.276195	2
59	9.724007	9.928499	9.795508	10.204492	10.071501	10.275993	1
60	9.724210	9.928420	9.795789	10.204211	10.071580	10.275790	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
121							Degrees 58

"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.
60.	204.	78.	282	10.	34.	13.	47	5.	17.	7.	24
50.	170.	65.	235	9.	31.	12.	42	4.	14.	5.	19
40.	136.	52.	188	8.	27.	10.	38	3.	10.	4.	14
30.	102.	39.	141	7.	24.	9.	33	2.	7.	3.	9
20.	68.	26.	94	6.	20.	8.	28	1.	3.	1.	5
Co-si. Sine Tang.			Co-si. Sine Tang.			Co-si. Sine Tang.			Co-si. Sine Tang.		

32 Degrees.

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	147
						O. Co-ar.	
0	9.724210	9.928420	9.795789	10.204211	10.071580	10.273790	60
1	9.724412	9.928342	9.796070	10.203930	10.071658	10.273588	59
2	9.724614	9.928263	9.796351	10.203649	10.071737	10.273386	58
3	9.724816	9.928183	9.796632	10.203368	10.071817	10.273184	57
4	9.725017	9.928104	9.796913	10.203087	10.071896	10.272983	56
5	9.725219	9.928025	9.797194	10.202806	10.071975	10.272781	55
6	9.725420	9.927946	9.797474	10.202526	10.072054	10.272580	54
7	9.725622	9.927867	9.797755	10.202245	10.072133	10.272378	53
8	9.725823	9.927787	9.798036	10.201964	10.072213	10.272177	52
9	9.726024	9.927708	9.798316	10.201684	10.072292	10.271976	51
10	9.726225	9.927629	9.798596	10.201404	10.072371	10.271775	50
11	9.726426	9.927549	9.798877	10.201123	10.072451	10.271574	49
12	9.726626	9.927470	9.799157	10.200843	10.072530	10.271374	48
13	9.726827	9.927390	9.799437	10.200563	10.072610	10.271173	47
14	9.727028	9.927310	9.799717	10.200283	10.072690	10.270973	46
15	9.727228	9.927231	9.799997	10.200003	10.072769	10.270772	45
16	9.727428	9.927151	9.800277	10.199723	10.072849	10.270572	44
17	9.727628	9.927071	9.800557	10.199443	10.072929	10.270372	43
18	9.727827	9.926991	9.800838	10.199164	10.073009	10.270172	42
19	9.728027	9.926911	9.801118	10.198884	10.073089	10.270173	41
20	9.728227	9.926831	9.801398	10.198604	10.073169	10.271773	40
21	9.728427	9.926751	9.801678	10.198324	10.073249	10.271573	39
22	9.728626	9.926671	9.801958	10.198045	10.073329	10.271374	38
23	9.728825	9.926591	9.802238	10.197765	10.073409	10.271175	37
24	9.729024	9.926511	9.802518	10.197485	10.073489	10.270976	36
25	9.729223	9.926431	9.802798	10.197205	10.073569	10.270777	35
26	9.729422	9.926351	9.803078	10.196925	10.073649	10.270578	34
27	9.729621	9.926270	9.803358	10.196645	10.073729	10.270379	33
28	9.729820	9.926190	9.803638	10.196365	10.073809	10.270180	32
29	9.730018	9.926110	9.803918	10.196085	10.073889	10.269982	31
30	9.730217	9.926030	9.804198	10.195805	10.073969	10.269783	30

Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					O. Co-ar.		
122							57

Degrees 57

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	260.	80.	280	10.	33.	13.	47	5.	17.	7.	23
50.	167.	66.	233	9.	30.	12.	42	4.	13.	5.	19
40.	133.	53.	187	8.	27.	11.	37	3.	10.	4.	14
30.	100.	40.	140	7.	23.	9.	33	2.	7.	3.	9
20.	67.	27.	93	6.	20.	8.	28	1.	3.	1.	5
	Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

117

32 Degrees.

147

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.
30	9.730217	9.926029	9.804187	10.195813	10.073971	10.269783		30
31	9.730415	9.925949	9.804406	10.195534	10.074051	10.269585		29
32	9.730613	9.925868	9.804745	10.195255	10.074132	10.269387		28
33	9.730811	9.925788	9.805023	10.194977	10.074212	10.269189		27
34	9.731009	9.925707	9.805302	10.194698	10.074293	10.268991		26
35	9.731206	9.925626	9.805580	10.194420	10.074374	10.268794		25
36	9.731404	9.925545	9.805859	10.194141	10.074455	10.268596		24
37	9.731602	9.925465	9.806137	10.193863	10.074535	10.268398		23
38	9.731799	9.925384	9.806415	10.193585	10.074616	10.268201		22
39	9.731996	9.925303	9.806693	10.193307	10.074697	10.268004		21
40	9.732193	9.925222	9.806971	10.193029	10.074778	10.267807		20
41	9.732390	9.925141	9.807249	10.192751	10.074859	10.267610		19
42	9.732587	9.925060	9.807527	10.192473	10.074940	10.267413		18
43	9.732784	9.924979	9.807805	10.192195	10.075021	10.267216		17
44	9.732980	9.924897	9.808083	10.191917	10.075103	10.267020		16
45	9.733177	9.924816	9.808361	10.191639	10.075184	10.266823		15
46	9.733373	9.924735	9.808638	10.191362	10.075265	10.266627		14
47	9.733569	9.924654	9.808916	10.191084	10.075346	10.266431		13
48	9.733765	9.924572	9.809193	10.190807	10.075428	10.266235		12
49	9.733961	9.924491	9.809471	10.190529	10.075509	10.266039		11
50	9.734157	9.924409	9.809748	10.190252	10.075591	10.265843		10
51	9.734353	9.924328	9.810025	10.189975	10.075672	10.265647		9
52	9.734549	9.924246	9.810302	10.189698	10.075754	10.265451		8
53	9.734744	9.924164	9.810580	10.189420	10.075836	10.265256		7
54	9.734939	9.924083	9.810857	10.189143	10.075917	10.265061		6
55	9.735135	9.924001	9.811134	10.188866	10.075999	10.264865		5
56	9.735330	9.923919	9.811410	10.188590	10.076081	10.264670		4
57	9.735525	9.923837	9.811687	10.188313	10.076163	10.264475		3
58	9.735719	9.923755	9.811964	10.188036	10.076245	10.264281		2
59	9.735914	9.923673	9.812241	10.187759	10.076327	10.264086		1
60	9.736109	9.923591	9.812517	10.187483	10.076409	10.263891		0

Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					o. Co-ar.		

122

Degrees 57

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	106.	81.	278	10.	33.	14.	46	5.	16.	7.	23
50.	164.	68.	231	9.	29.	12.	42	4.	13.	5.	19
40.	131.	54.	185	8.	26.	11.	37	3.	10.	4.	14
30.	98.	41.	139	7.	23.	9.	32	2.	7.	3.	9
20.	65.	27.	93	6.	20.	8.	28	1.	3.	1.	5
	Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.

33 Degrees.								146			
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.			
0	9.736109	9.923591	9.812517	10.187483	10.076409	10.263891		60			
1	9.736303	9.923509	9.812794	10.187206	10.076491	10.263697		59			
2	9.736498	9.923427	9.813070	10.186930	10.076573	10.263502		58			
3	9.736692	9.923345	9.813347	10.186653	10.076655	10.263308		57			
4	9.736886	9.923263	9.813623	10.186377	10.076737	10.263114		56			
5	9.737080	9.923181	9.813899	10.186101	10.076819	10.262920		55			
6	9.737274	9.923098	9.814176	10.185824	10.076902	10.262726		54			
7	9.737467	9.923016	9.814452	10.185548	10.076984	10.262533		53			
8	9.737661	9.922933	9.814728	10.185272	10.077067	10.262339		52			
9	9.737855	9.922851	9.815004	10.184996	10.077149	10.262145		51			
10	9.738048	9.922768	9.815280	10.184720	10.077232	10.261952		50			
11	9.738241	9.922686	9.815555	10.184445	10.077314	10.261759		49			
12	9.738434	9.922603	9.815831	10.184169	10.077397	10.261566		48			
13	9.738627	9.922520	9.816107	10.183893	10.077480	10.261373		47			
14	9.738820	9.922438	9.816382	10.183618	10.077562	10.261180		46			
15	9.739013	9.922355	9.816658	10.183342	10.077645	10.260987		45			
16	9.739206	9.922272	9.816933	10.183067	10.077728	10.260794		44			
17	9.739398	9.922189	9.817209	10.182791	10.077811	10.260602		43			
18	9.739590	9.922106	9.817484	10.182516	10.077894	10.260410		42			
19	9.739783	9.922023	9.817759	10.182241	10.077977	10.260217		41			
20	9.739975	9.921940	9.818035	10.181965	10.078060	10.260025		40			
21	9.740167	9.921857	9.818310	10.181690	10.078143	10.259833		39			
22	9.740359	9.921774	9.818585	10.181415	10.078226	10.259641		38			
23	9.740550	9.921691	9.818860	10.181140	10.078309	10.259450		37			
24	9.740742	9.921607	9.819135	10.180865	10.078393	10.259258		36			
25	9.740934	9.921524	9.819410	10.180590	10.078476	10.259066		35			
26	9.741125	9.921441	9.819684	10.180316	10.078559	10.258875		34			
27	9.741316	9.921357	9.819959	10.180041	10.078643	10.258684		33			
28	9.741508	9.921274	9.820234	10.179766	10.078726	10.258492		32			
29	9.741699	9.921190	9.820508	10.179492	10.078810	10.258301		31			
30	9.741889	9.921107	9.820783	10.179217	10.078893	10.258111		30			
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	o. Co-ar.	Min.			
123								56			
Degrees								56			
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	193.	83.	276	10.	32.	14.	46	5.	16.	7.	23
50.	160.	69.	230	9.	29.	12.	41	4.	13.	6.	18
40.	128.	55.	184	8.	26.	11.	37	3.	10.	4.	14
30.	96.	41.	138	7.	22.	10.	32	2.	6.	3.	9
20.	64.	28.	92	6.	19.	8.	28	1.	3.	1.	5
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

33 Degrees.							146
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.741889	9.921107	9.820783	10.179217	10.078893	10.258111	30
31	9.742080	9.921023	9.821057	10.178943	10.078977	10.257920	29
32	9.742271	9.920939	9.821332	10.178668	10.079061	10.257729	28
33	9.742462	9.920856	9.821606	10.178394	10.079144	10.257538	27
34	9.742652	9.920772	9.821880	10.178120	10.079228	10.257348	26
35	9.742842	9.920688	9.822154	10.177846	10.079312	10.257158	25
36	9.743033	9.920604	9.822429	10.177571	10.079396	10.256967	24
37	9.743223	9.920520	9.822703	10.177297	10.079480	10.256777	23
38	9.743413	9.920436	9.822977	10.177023	10.079564	10.256587	22
39	9.743602	9.920352	9.823251	10.176749	10.079648	10.256398	21
40	9.743792	9.920268	9.823524	10.176476	10.079732	10.256208	20
41	9.743982	9.920184	9.823798	10.176202	10.079816	10.256018	19
42	9.744171	9.920099	9.824072	10.175928	10.079901	10.255829	18
43	9.744361	9.920015	9.824345	10.175655	10.079985	10.255639	17
44	9.744550	9.919931	9.824619	10.175381	10.080069	10.255450	16
45	9.744739	9.919846	9.824893	10.175107	10.080154	10.255261	15
46	9.744928	9.919762	9.825166	10.174834	10.080238	10.255072	14
47	9.745117	9.919677	9.825439	10.174561	10.080323	10.254883	13
48	9.745306	9.919593	9.825713	10.174287	10.080407	10.254694	12
49	9.745494	9.919508	9.825986	10.174014	10.080492	10.254506	11
50	9.745683	9.919424	9.826259	10.173741	10.080576	10.254317	10
51	9.745871	9.919339	9.826532	10.173468	10.080661	10.254129	9
52	9.746060	9.919254	9.826805	10.173195	10.080746	10.253940	8
53	9.746248	9.919169	9.827078	10.172922	10.080831	10.253752	7
54	9.746436	9.919085	9.827351	10.172649	10.080915	10.253564	6
55	9.746624	9.919000	9.827624	10.172376	10.081000	10.253376	5
56	9.746812	9.918915	9.827897	10.172103	10.081085	10.253188	4
57	9.746999	9.918830	9.828170	10.171830	10.081170	10.253001	3
58	9.747187	9.918745	9.828442	10.171558	10.081255	10.252813	2
59	9.747374	9.918659	9.828715	10.171285	10.081341	10.252626	1
60	9.747562	9.918574	9.828987	10.171013	10.081426	10.252438	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

Degrees 56

"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.
60.	189.	84.	273	10.	32.	14.	46	5.	16.	7.	23
50.	158.	70.	228	9.	28.	12.	41	4.	13.	6.	18
40.	126.	56.	182	8.	25.	11.	36	3.	9.	4.	14
30.	95.	42.	137	7.	22.	10.	32	2.	6.	3.	9
20.	63.	28.	91	6.	19.	8.	27	1.	3.	1.	5
	Co-si.	Sine.	Tang.		Co-si.	Sine.	Tang.		Co-si.	Sine.	Tang.

34 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.747562	9.918574	9.828987	10.171013	10.081426	10.252438	60
1	9.747749	9.918489	9.829160	10.170740	10.081511	10.252251	59
2	9.747936	9.918404	9.829332	10.170468	10.081596	10.252064	58
3	9.748123	9.918318	9.829505	10.170195	10.081682	10.251877	57
4	9.748310	9.918233	9.829677	10.169923	10.081767	10.251690	56
5	9.748497	9.918147	9.829849	10.169651	10.081853	10.251503	55
6	9.748683	9.918062	9.830021	10.169379	10.081938	10.251317	54
7	9.748870	9.917976	9.830193	10.169107	10.082024	10.251130	53
8	9.749056	9.917891	9.831165	10.168835	10.082109	10.250944	52
9	9.749243	9.917805	9.831437	10.168563	10.082195	10.250757	51
10	9.749429	9.917719	9.831709	10.168291	10.082281	10.250571	50
11	9.749615	9.917634	9.831981	10.168019	10.082366	10.250385	49
12	9.749801	9.917548	9.832253	10.167747	10.082452	10.250199	48
13	9.749987	9.917462	9.832525	10.167475	10.082538	10.250013	47
14	9.750172	9.917376	9.832796	10.167204	10.082624	10.249828	46
15	9.750358	9.917290	9.833068	10.166932	10.082710	10.249642	45
16	9.750543	9.917204	9.833339	10.166661	10.082796	10.249457	44
17	9.750729	9.917118	9.833611	10.166389	10.082882	10.249271	43
18	9.750914	9.917032	9.833882	10.166118	10.082968	10.249086	42
19	9.751099	9.916946	9.834154	10.165846	10.083054	10.248901	41
20	9.751284	9.916859	9.834425	10.165575	10.083141	10.248716	40
21	9.751469	9.916773	9.834696	10.165304	10.083227	10.248531	39
22	9.751654	9.916687	9.834967	10.165034	10.083313	10.248346	38
23	9.751839	9.916600	9.835238	10.164762	10.083400	10.248161	37
24	9.752023	9.916514	9.835509	10.164491	10.083486	10.247977	36
25	9.752208	9.916427	9.835780	10.164220	10.083573	10.247792	35
26	9.752392	9.916341	9.836051	10.163949	10.083659	10.247608	34
27	9.752576	9.916254	9.836322	10.163678	10.083746	10.247424	33
28	9.752760	9.916167	9.836593	10.163407	10.083833	10.247240	32
29	9.752944	9.916081	9.836864	10.163136	10.083919	10.247056	31
30	9.753128	9.915994	9.837134	10.162866	10.084006	10.246872	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

124

Degrees 55

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	186.	86.	271	10.	31.	14.	45	5.	15.	7.	23
50.	155.	72.	226	9.	28.	13.	41	4.	12.	6.	18
40.	124.	57.	181	8.	25.	11.	36	3.	9.	4.	14
30.	93.	43.	136	7.	22.	10.	32	2.	6.	3.	9
20.	62.	29.	91	6.	19.	9.	27	1.	3.	1.	5
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

121

34 Degrees.							145
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.753128	9.915994	9.837134	10.162866	10.084006	10.246872	30
31	9.753312	9.915907	9.837405	10.162595	10.084093	10.246688	29
32	9.753495	9.915820	9.837675	10.162325	10.084180	10.246505	28
33	9.753679	9.915733	9.837946	10.162054	10.084267	10.246321	27
34	9.753862	9.915646	9.838216	10.161784	10.084354	10.246138	26
35	9.754046	9.915559	9.838487	10.161513	10.084441	10.245954	25
36	9.754229	9.915472	9.838757	10.161243	10.084528	10.245771	24
37	9.754412	9.915385	9.839027	10.160973	10.084615	10.245588	23
38	9.754595	9.915297	9.839297	10.160703	10.084703	10.245405	22
39	9.754778	9.915210	9.839568	10.160432	10.084790	10.245222	21
40	9.754960	9.915123	9.839838	10.160162	10.084877	10.245040	20
41	9.755143	9.915035	9.840108	10.159892	10.084965	10.244857	19
42	9.755326	9.914948	9.840378	10.159622	10.085052	10.244674	18
43	9.755508	9.914860	9.840648	10.159352	10.085140	10.244492	17
44	9.755690	9.914773	9.840917	10.159083	10.085227	10.244310	16
45	9.755872	9.914685	9.841187	10.158813	10.085315	10.244128	15
46	9.756054	9.914598	9.841457	10.158543	10.085402	10.243946	14
47	9.756236	9.914510	9.841727	10.158273	10.085490	10.243764	13
48	9.756418	9.914422	9.841996	10.158004	10.085578	10.243582	12
49	9.756600	9.914334	9.842266	10.157734	10.085666	10.243400	11
50	9.756782	9.914246	9.842535	10.157465	10.085754	10.243218	10
51	9.756963	9.914158	9.842805	10.157195	10.085842	10.243037	9
52	9.757144	9.914070	9.843074	10.156926	10.085930	10.242856	8
53	9.757326	9.913982	9.843343	10.156657	10.086018	10.242674	7
54	9.757507	9.913894	9.843612	10.156388	10.086106	10.242493	6
55	9.757688	9.913806	9.843882	10.156118	10.086194	10.242312	5
56	9.757869	9.913718	9.844151	10.155849	10.086282	10.242131	4
57	9.758050	9.913630	9.844420	10.155580	10.086370	10.241950	3
58	9.758230	9.913541	9.844689	10.155311	10.086459	10.241770	2
59	9.758411	9.913453	9.844958	10.155042	10.086547	10.241589	1
60	9.758591	9.913365	9.845227	10.154773	10.086635	10.241409	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
124							124

Degrees 55

"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.	"	Sine.	Co-si.	Tang.
60.	182.	88.	270	10.	30.	15.	45	5.	15.	7.	23
50.	152.	73.	225	9.	27.	13.	40	4.	12.	6.	18
40.	121.	58.	180	8.	24.	12.	36	3.	9.	4.	13
30.	91.	44.	135	7.	21.	10.	31	2.	6.	3.	9
20.	61.	29.	90	6.	18.	9.	27	1.	3.	1.	4
	Co-si.	Sine.	Tang.		Co-si.	Sine.	Tang.		Co-si.	Sine.	Tang.

35 Degrees.								144
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.	
0	9.758591	9.913365	9.845227	10.154773	10.086635	10.241409	60	
1	9.758772	9.913276	9.845496	10.154504	10.086724	10.241228	59	
2	9.758952	9.913187	9.845764	10.154236	10.086813	10.241048	58	
3	9.759132	9.913099	9.846033	10.153967	10.086901	10.240868	57	
4	9.759312	9.913010	9.846302	10.153698	10.086990	10.240688	56	
5	9.759492	9.912922	9.846570	10.153430	10.087078	10.240508	55	
6	9.759672	9.912833	9.846839	10.153161	10.087167	10.240328	54	
7	9.759852	9.912744	9.847108	10.152892	10.087256	10.240148	53	
8	9.760031	9.912655	9.847376	10.152624	10.087345	10.239969	52	
9	9.760211	9.912566	9.847644	10.152356	10.087434	10.239789	51	
10	9.760390	9.912477	9.847913	10.152087	10.087523	10.239610	50	
11	9.760569	9.912388	9.848181	10.151819	10.087612	10.239431	49	
12	9.760748	9.912299	9.848449	10.151551	10.087701	10.239252	48	
13	9.760927	9.912210	9.848717	10.151283	10.087790	10.239073	47	
14	9.761106	9.912121	9.848986	10.151014	10.087879	10.238894	46	
15	9.761285	9.912031	9.849254	10.150746	10.087969	10.238715	45	
16	9.761464	9.911942	9.849522	10.150478	10.088058	10.238536	44	
17	9.761642	9.911853	9.849790	10.150210	10.088147	10.238358	43	
18	9.761821	9.911763	9.850057	10.149943	10.088237	10.238179	42	
19	9.761999	9.911674	9.850325	10.149675	10.088326	10.238001	41	
20	9.762177	9.911584	9.850593	10.149407	10.088416	10.237823	40	
21	9.762356	9.911495	9.850861	10.149139	10.088505	10.237644	39	
22	9.762534	9.911405	9.851129	10.148871	10.088595	10.237466	38	
23	9.762713	9.911315	9.851396	10.148604	10.088685	10.237288	37	
24	9.762889	9.911226	9.851664	10.148336	10.088774	10.237111	36	
25	9.763067	9.911136	9.851931	10.148069	10.088864	10.236933	35	
26	9.763245	9.911046	9.852199	10.147801	10.088954	10.236755	34	
27	9.763422	9.910956	9.852466	10.147534	10.089044	10.236578	33	
28	9.763600	9.910866	9.852733	10.147267	10.089134	10.236400	32	
29	9.763777	9.910776	9.853001	10.146999	10.089224	10.236223	31	
30	9.763954	9.910686	9.853268	10.146732	10.089314	10.236046	30	

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
123							

Degrees 54

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	179.	89.	268	10.	30.	15.	45	5.	15.	7.	22
50.	149.	74.	223	9.	27.	13.	40	4.	12.	6.	18
40.	119.	60.	179	8.	24.	12.	36	3.	9.	4.	13
30.	89.	45.	134	7.	21.	10.	31	2.	6.	3.	9
20.	60.	30.	89	6.	18.	9.	27	1.	3.	1.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang

Log. Sines, Tangents, Secants, &c.

123

35 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.
30	9.763954	9.910686	9.853268	10.146732	10.089314	10.236046		30
31	9.764131	9.910596	9.853335	10.146465	10.089404	10.235869		29
32	9.764308	9.910506	9.853802	10.146198	10.089494	10.235692		28
33	9.764485	9.910415	9.854069	10.145931	10.089585	10.235515		27
34	9.764662	9.910325	9.854336	10.145664	10.089675	10.235338		26
35	9.764838	9.910235	9.854603	10.145397	10.089765	10.235162		25
36	9.765015	9.910144	9.854870	10.145130	10.089856	10.234985		24
37	9.765191	9.910054	9.855137	10.144863	10.089946	10.234809		23
38	9.765367	9.909963	9.855404	10.144596	10.090037	10.234633		22
39	9.765544	9.909873	9.855671	10.144329	10.090127	10.234456		21
40	9.765720	9.909782	9.855938	10.144062	10.090218	10.234280		20
41	9.765896	9.909691	9.856204	10.143796	10.090308	10.234104		19
42	9.766072	9.909601	9.856471	10.143529	10.090399	10.233928		18
43	9.766247	9.909510	9.856737	10.143263	10.090490	10.233753		17
44	9.766423	9.909419	9.857004	10.142996	10.090581	10.233577		16
45	9.766598	9.909328	9.857270	10.142730	10.090672	10.233402		15
46	9.766774	9.909237	9.857537	10.142463	10.090763	10.233226		14
47	9.766949	9.909146	9.857803	10.142197	10.090854	10.233051		13
48	9.767124	9.909055	9.858069	10.141931	10.090945	10.232876		12
49	9.767300	9.908964	9.858336	10.141664	10.091036	10.232700		11
50	9.767475	9.908873	9.858602	10.141398	10.091127	10.232525		10
51	9.767649	9.908781	9.858868	10.141132	10.091219	10.232351		9
52	9.767824	9.908690	9.859134	10.140866	10.091310	10.232176		8
53	9.767999	9.908599	9.859400	10.140600	10.091401	10.232001		7
54	9.768173	9.908507	9.859666	10.140334	10.091493	10.231826		6
55	9.768348	9.908416	9.859932	10.140068	10.091584	10.231652		5
56	9.768522	9.908324	9.860198	10.139802	10.091676	10.231478		4
57	9.768697	9.908233	9.860464	10.139536	10.091767	10.231303		3
58	9.768871	9.908141	9.860730	10.139270	10.091859	10.231129		2
59	9.769045	9.908049	9.860995	10.139005	10.091951	10.230955		1
60	9.769219	9.907958	9.861261	10.138739	10.092042	10.230781		0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	o. Co-ar.	Min.

125

Degrees 54

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	175.	91.	266	10.	29.	15.	44	5.	15.	8.	22
50.	146.	76.	222	9.	26.	14.	40	4.	12.	6.	18
40.	117.	61.	177	8.	23.	12.	36	3.	9.	5.	13
30.	88.	45.	133	7.	20.	11.	31	2.	6.	3.	9
20.	58.	30.	89	6.	18.	9.	27	1.	3.	2.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

36 Degrees.							143				
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.				
0	9.769219	9.907958	9.861261	10.138739	10.092042	10.230781	60				
1	9.769393	9.907866	9.861527	10.138473	10.092134	10.230607	59				
2	9.769566	9.907774	9.861792	10.138208	10.092226	10.230434	58				
3	9.769740	9.907682	9.862058	10.137942	10.092318	10.230260	57				
4	9.769913	9.907590	9.862323	10.137677	10.092410	10.230087	56				
5	9.770087	9.907498	9.862589	10.137411	10.092502	10.229913	55				
6	9.770260	9.907406	9.862854	10.137146	10.092594	10.229740	54				
7	9.770433	9.907314	9.863119	10.136880	10.092686	10.229567	53				
8	9.770606	9.907222	9.863385	10.136615	10.092778	10.229394	52				
9	9.770779	9.907129	9.863650	10.136350	10.092871	10.229221	51				
10	9.770952	9.907037	9.863915	10.136085	10.092963	10.229048	50				
11	9.771125	9.906945	9.864180	10.135820	10.093055	10.228875	49				
12	9.771298	9.906852	9.864445	10.135555	10.093148	10.228702	48				
13	9.771470	9.906760	9.864710	10.135290	10.093240	10.228530	47				
14	9.771643	9.906667	9.864975	10.135025	10.093333	10.228357	46				
15	9.771815	9.906575	9.865240	10.134760	10.093425	10.228185	45				
16	9.771987	9.906482	9.865505	10.134495	10.093518	10.228013	44				
17	9.772159	9.906389	9.865770	10.134230	10.093611	10.227841	43				
18	9.772331	9.906296	9.866035	10.133965	10.093704	10.227669	42				
19	9.772503	9.906204	9.866300	10.133700	10.093796	10.227497	41				
20	9.772675	9.906111	9.866564	10.133436	10.093889	10.227325	40				
21	9.772847	9.906018	9.866829	10.133171	10.093982	10.227153	39				
22	9.773018	9.905925	9.867094	10.132906	10.094075	10.226982	38				
23	9.773190	9.905832	9.867358	10.132642	10.094168	10.226810	37				
24	9.773361	9.905739	9.867623	10.132377	10.094261	10.226639	36				
25	9.773533	9.905645	9.867887	10.132113	10.094355	10.226467	35				
26	9.773704	9.905552	9.868152	10.131848	10.094448	10.226296	34				
27	9.773875	9.905459	9.868416	10.131584	10.094541	10.226125	33				
28	9.774046	9.905366	9.868680	10.131320	10.094634	10.225954	32				
29	9.774217	9.905272	9.868945	10.131055	10.094728	10.225783	31				
30	9.774388	9.905179	9.869209	10.130791	10.094821	10.225612	30				
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.				
126											
							Degrees 53				
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	172.	93.	265	10.	29.	15.	44	5.	14.	8.	22
50.	144.	77.	221	9.	26.	14.	40	4.	11.	6.	18
40.	115.	62.	177	8.	23.	12.	35	3.	9.	5.	13
30.	86.	46.	132	7.	20.	11.	31	2.	6.	3.	9
20.	57.	31.	88	6.	17.	9.	26	1.	3.	2.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

125

36 Degrees.							143
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.774388	9.905179	9.869209	10.130791	10.094821	10.225612	30
31	9.774558	9.905085	9.869473	10.130527	10.094915	10.225442	29
32	9.774729	9.904992	9.869737	10.130263	10.095008	10.225271	28
33	9.774899	9.904898	9.870001	10.129999	10.095102	10.225101	27
34	9.775070	9.904804	9.870265	10.129735	10.095196	10.224930	26
35	9.775240	9.904711	9.870529	10.129471	10.095289	10.224760	25
36	9.775410	9.904617	9.870793	10.129207	10.095383	10.224590	24
37	9.775580	9.904523	9.871057	10.128943	10.095477	10.224420	23
38	9.775750	9.904429	9.871321	10.128679	10.095571	10.224250	22
39	9.775920	9.904335	9.871585	10.128415	10.095665	10.224080	21
40	9.776090	9.904241	9.871849	10.128151	10.095759	10.223910	20
41	9.776259	9.904147	9.872112	10.127888	10.095853	10.223741	19
42	9.776429	9.904053	9.872376	10.127624	10.095947	10.223571	18
43	9.776598	9.903959	9.872640	10.127360	10.096041	10.223402	17
44	9.776768	9.903864	9.872903	10.127097	10.096136	10.223232	16
45	9.776937	9.903770	9.873167	10.126833	10.096230	10.223063	15
46	9.777106	9.903676	9.873430	10.126570	10.096324	10.222894	14
47	9.777275	9.903581	9.873694	10.126306	10.096419	10.222725	13
48	9.777444	9.903487	9.873957	10.126043	10.096513	10.222556	12
49	9.777613	9.903392	9.874220	10.125780	10.096608	10.222387	11
50	9.777781	9.903298	9.874484	10.125516	10.096702	10.222219	10
51	9.777950	9.903203	9.874747	10.125253	10.096797	10.222050	9
52	9.778119	9.903108	9.875010	10.124990	10.096892	10.221881	8
53	9.778287	9.903014	9.875273	10.124727	10.096986	10.221713	7
54	9.778455	9.902919	9.875537	10.124463	10.097081	10.221545	6
55	9.778624	9.902824	9.875800	10.124200	10.097176	10.221376	5
56	9.778792	9.902729	9.876063	10.123937	10.097271	10.221208	4
57	9.778960	9.902634	9.876326	10.123674	10.097366	10.221040	3
58	9.779128	9.902539	9.876589	10.123411	10.097461	10.220872	2
59	9.779295	9.902444	9.876852	10.123148	10.097556	10.220705	1
60	9.779463	9.902349	9.877114	10.122886	10.097651	10.220537	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
126							Degrees 53

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	169.	94.	263	10.	28.	16.	44	5.	14.	8.	22
50.	141.	79.	220	9.	26.	14.	40	4.	11.	6.	18
40.	113.	63.	176	8.	23.	13.	35	3.	8.	5.	13
30.	85.	47.	132	7.	20.	11.	31	2.	6.	3.	9
20.	56.	31.	88	6.	17.	9.	26	1.	3.	2.	4
Co-fi. Sine. Tang.			Co-fi. Sine. Tang.			Co-fi. Sine. Tang.					

37 Degrees.								142
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.	
0	9.779463	9.902349	9.877114	10.122886	10.097651	10.220537	60	
1	9.779631	9.902253	9.877377	10.122623	10.097747	10.220369	59	
2	9.779798	9.902158	9.877640	10.122360	10.097842	10.220201	58	
3	9.779966	9.902063	9.877903	10.122097	10.097937	10.220034	57	
4	9.780133	9.901967	9.878165	10.121835	10.098033	10.219867	56	
5	9.780300	9.901872	9.878428	10.121572	10.098128	10.219700	55	
6	9.780467	9.901776	9.878691	10.121309	10.098224	10.219533	54	
7	9.780634	9.901681	9.878953	10.121047	10.098319	10.219366	53	
8	9.780801	9.901585	9.879216	10.120784	10.098415	10.219199	52	
9	9.780968	9.901490	9.879478	10.120522	10.098510	10.219032	51	
10	9.781134	9.901394	9.879741	10.120259	10.098606	10.218866	50	
11	9.781301	9.901298	9.880003	10.119997	10.098702	10.218699	49	
12	9.781468	9.901202	9.880265	10.119735	10.098798	10.218532	48	
13	9.781634	9.901106	9.880528	10.119472	10.098894	10.218366	47	
14	9.781800	9.901010	9.880790	10.119210	10.098990	10.218200	46	
15	9.781966	9.900914	9.881052	10.118948	10.099086	10.218034	45	
16	9.782132	9.900818	9.881314	10.118686	10.099182	10.217868	44	
17	9.782298	9.900722	9.881577	10.118424	10.099278	10.217702	43	
18	9.782464	9.900626	9.881839	10.118161	10.099374	10.217536	42	
19	9.782630	9.900529	9.882101	10.117899	10.099471	10.217370	41	
20	9.782796	9.900433	9.882363	10.117637	10.099567	10.217204	40	
21	9.782961	9.900337	9.882625	10.117375	10.099663	10.217039	39	
22	9.783127	9.900240	9.882887	10.117113	10.099760	10.216873	38	
23	9.783292	9.900144	9.883148	10.116852	10.099856	10.216708	37	
24	9.783458	9.900047	9.883410	10.116590	10.099953	10.216542	36	
25	9.783623	9.899951	9.883672	10.116328	10.100049	10.216377	35	
26	9.783788	9.899854	9.883934	10.116066	10.100146	10.216212	34	
27	9.783953	9.899757	9.884196	10.115804	10.100243	10.216047	33	
28	9.784118	9.899660	9.884457	10.115543	10.100340	10.215882	32	
29	9.784282	9.899564	9.884719	10.115281	10.100436	10.215718	31	
30	9.784447	9.899467	9.884980	10.115020	10.100533	10.215553	30	
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.	
127								
Degrees 52								
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	
60.	166.	96.	262	10.	28.	16.	44	
50.	238.	80.	219	9.	25.	14.	42	
40.	111.	64.	175	8.	22.	13.	35	
30.	83.	48.	131	7.	19.	11.	31	
20.	55.	14.	42	6.	17.	10.	26	
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.	

37 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.784447	9.899467	9.884980	10.115020	10.100533	10.215553	30
31	9.784612	9.899370	9.885242	10.114758	10.100630	10.215388	29
32	9.784776	9.899273	9.885504	10.114496	10.100727	10.215224	28
33	9.784941	9.899176	9.885765	10.114235	10.100824	10.215059	27
34	9.785105	9.899078	9.886026	10.113974	10.100922	10.214895	26
35	9.785269	9.898981	9.886288	10.113712	10.101019	10.214731	25
36	9.785433	9.898884	9.886549	10.113451	10.101116	10.214567	24
37	9.785597	9.898787	9.886811	10.113189	10.101213	10.214403	23
38	9.785761	9.898689	9.887072	10.112928	10.101311	10.214239	22
39	9.785925	9.898592	9.887333	10.112667	10.101408	10.214075	21
40	9.786089	9.898494	9.887594	10.112406	10.101506	10.213911	20
41	9.786252	9.898397	9.887855	10.112145	10.101603	10.213748	19
42	9.786416	9.898299	9.888116	10.111884	10.101701	10.213584	18
43	9.786579	9.898202	9.888378	10.111622	10.101798	10.213421	17
44	9.786742	9.898104	9.888639	10.111361	10.101896	10.213258	16
45	9.786906	9.898006	9.888900	10.111100	10.101994	10.213094	15
46	9.787069	9.897908	9.889161	10.110839	10.102092	10.212931	14
47	9.787232	9.897810	9.889421	10.110579	10.102190	10.212768	13
48	9.787395	9.897712	9.889683	10.110318	10.102288	10.212605	12
49	9.787557	9.897614	9.889943	10.110057	10.102386	10.212443	11
50	9.787720	9.897516	9.890204	10.109796	10.102484	10.212280	10
51	9.787883	9.897418	9.890465	10.109535	10.102582	10.212117	9
52	9.788045	9.897320	9.890725	10.109275	10.102680	10.211955	8
53	9.788208	9.897222	9.890986	10.109014	10.102778	10.211792	7
54	9.788370	9.897123	9.891247	10.108753	10.102877	10.211630	6
55	9.788532	9.897025	9.891507	10.108493	10.102975	10.211468	5
56	9.788694	9.896926	9.891768	10.108232	10.103074	10.211306	4
57	9.788856	9.896828	9.892028	10.107972	10.103172	10.211144	3
58	9.789018	9.896729	9.892289	10.107711	10.103271	10.210982	2
59	9.789180	9.896631	9.892549	10.107451	10.103369	10.210820	1
60	9.789342	9.896532	9.892810	10.107190	10.103468	10.210658	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

127

Degrees 52

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	163.	98.	261	10.	27.	16.	43	5.	14.	8.	22
50.	136.	81.	217	9.	24.	15.	39	4.	11.	7.	17
40.	109.	65.	174	8.	22.	13.	35	3.	8.	5.	13
30.	82.	49.	130	7.	19.	11.	30	2.	5.	3.	9
20.	54.	33.	87	6.	16.	10.	26	1.	3.	2.	4
Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.	

38 Degrees.								141
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	0. Co-ar.	Min.
0	9.789342	9.896532	9.892810	10.107190	10.103468	10.210658		60
1	9.789504	9.896433	9.893070	10.106930	10.103567	10.210496		59
2	9.789665	9.896335	9.893331	10.106669	10.103665	10.210335		58
3	9.789827	9.896236	9.893591	10.106409	10.103764	10.210173		57
4	9.789988	9.896137	9.893851	10.106149	10.103863	10.210012		46
5	9.790149	9.896038	9.894111	10.105889	10.103962	10.209851		55
6	9.790310	9.895939	9.894372	10.105628	10.104061	10.209690		54
7	9.790471	9.895840	9.894632	10.105368	10.104160	10.209529		53
8	9.790632	9.895741	9.894892	10.105108	10.104259	10.209368		52
9	9.790793	9.895641	9.895152	10.104848	10.104359	10.209207		51
10	9.790954	9.895542	9.895412	10.104588	10.104458	10.209046		50
11	9.791115	9.895443	9.895672	10.104328	10.104557	10.208885		49
12	9.791275	9.895343	9.895932	10.104068	10.104657	10.208725		48
13	9.791436	9.895244	9.896192	10.103808	10.104756	10.208564		47
14	9.791596	9.895145	9.896452	10.103548	10.104855	10.208404		46
15	9.791757	9.895045	9.896712	10.103288	10.104955	10.208243		45
16	9.791917	9.894945	9.896971	10.103029	10.105055	10.208083		44
17	9.792077	9.894846	9.897231	10.102769	10.105154	10.207923		43
18	9.792237	9.894746	9.897491	10.102509	10.105254	10.207763		42
19	9.792397	9.894646	9.897751	10.102249	10.105354	10.207603		41
20	9.792557	9.894546	9.898010	10.101990	10.105454	10.207443		40
21	9.792716	9.894446	9.898270	10.101730	10.105554	10.207284		39
22	9.792876	9.894346	9.898530	10.101470	10.105654	10.207124		38
23	9.793035	9.894246	9.898789	10.101211	10.105754	10.206965		37
24	9.793195	9.894146	9.899049	10.100951	10.105854	10.206805		36
25	9.793354	9.894046	9.899308	10.100692	10.105954	10.206646		35
26	9.793514	9.893946	9.899568	10.100432	10.106054	10.206486		34
27	9.793673	9.893846	9.899827	10.100173	10.106154	10.206327		33
28	9.793833	9.893745	9.900087	10.099913	10.106255	10.206168		32
29	9.793991	9.893645	9.900346	10.099654	10.106355	10.206009		31
30	9.794150	9.893544	9.900605	10.099395	10.106456	10.205850		30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	0. Co-ar.	Min.

128

Degrees 51

#	Sine.	Co-sine.	Tang.	#	Sine.	Co-sine.	Tang.	#	Sine.	Co-sine.	Tang.
60.	160.	100.	260	10.	27.	17.	43	5.	13.	8.	22
50.	134.	83.	216	9.	24.	15.	38	4.	11.	7.	17
40.	107.	66.	173	8.	21.	13.	34	3.	8.	5.	13
30.	80.	50.	130	7.	19.	12.	30	2.	5.	3.	9
20.	53.	33.	87	6.	16.	10.	26	1.	3.	2.	4
	Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

129

38 Degrees.							141
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.794150	9.893544	9.900805	10.099395	10.106456	10.205850	30
31	9.794308	9.893444	9.900864	10.099135	10.106556	10.205692	29
32	9.794467	9.893343	9.901124	10.098876	10.106657	10.205533	28
33	9.794626	9.893243	9.901383	10.098617	10.106757	10.205374	27
34	9.794784	9.893142	9.901642	10.098358	10.106858	10.205216	26
35	9.794942	9.893041	9.901901	10.098099	10.106959	10.205058	25
36	9.795101	9.892940	9.902160	10.097840	10.107060	10.204899	24
37	9.795259	9.892839	9.902420	10.097580	10.107161	10.204741	23
38	9.795417	9.892739	9.902679	10.097321	10.107261	10.204583	22
39	9.795575	9.892638	9.902938	10.097062	10.107362	10.204425	21
40	9.795733	9.892536	9.903197	10.096803	10.107464	10.204267	20
41	9.795891	9.892435	9.903456	10.096544	10.107565	10.204109	19
42	9.796049	9.892334	9.903714	10.096286	10.107666	10.203951	18
43	9.796206	9.892233	9.903973	10.096027	10.107767	10.203794	17
44	9.796364	9.892132	9.904232	10.095768	10.107868	10.203636	16
45	9.796521	9.892030	9.904491	10.095509	10.107970	10.203479	15
46	9.796679	9.891929	9.904750	10.095250	10.108071	10.203321	14
47	9.796836	9.891827	9.905008	10.094992	10.108173	10.203164	13
48	9.796993	9.891726	9.905267	10.094733	10.108274	10.203007	12
49	9.797150	9.891624	9.905526	10.094474	10.108376	10.202850	11
50	9.797307	9.891523	9.905785	10.094215	10.108477	10.202693	10
51	9.797464	9.891421	9.906043	10.093957	10.108579	10.202536	9
52	9.797621	9.891319	9.906302	10.093698	10.108681	10.202379	8
53	9.797777	9.891217	9.906560	10.093440	10.108783	10.202223	7
54	9.797934	9.891115	9.906819	10.093181	10.108885	10.202066	6
55	9.798091	9.891013	9.907077	10.092923	10.108987	10.201909	5
56	9.798247	9.890911	9.907336	10.092664	10.109090	10.201753	4
57	9.798403	9.890809	9.907594	10.092406	10.109191	10.201597	3
58	9.798560	9.890707	9.907853	10.092147	10.109293	10.201440	2
59	9.798716	9.890605	9.908111	10.091889	10.109395	10.201284	1
60	9.798872	9.890503	9.908369	10.091631	10.109497	10.201128	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.			
60.	157.	101.	259	10.	26.	17.	43	5.	13.	8.	22			
50.	131.	85.	216	9.	24.	15.	39	4.	10.	7.	17			
40.	105.	68.	172	8.	22.	14.	34	3.	8.	5.	13			
30.	79.	51.	129	7.	18.	12.	30	2.	5.	3.	9			
20.	52.	34.	86	6.	16.	10.	26	1.	3.	2.	4			
Co-f.			Sine.	Tang.	Co-f.			Sine.	Tang.	Co-f.			Sine.	Tang.

39 Degrees.							140				
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.				
0	9.798872	9.890503	9.908369	10.091631	10.109497	10.201128	60				
1	9.799028	9.890400	9.908628	10.091372	10.109600	10.200972	59				
2	9.799184	9.890298	9.908886	10.091114	10.109702	10.200816	58				
3	9.799339	9.890195	9.909144	10.090856	10.109805	10.200661	57				
4	9.799495	9.890093	9.909402	10.090598	10.109907	10.200505	56				
5	9.799651	9.889990	9.909660	10.090340	10.110010	10.200349	55				
6	9.799806	9.889888	9.909918	10.090082	10.110112	10.200194	54				
7	9.799962	9.889785	9.910177	10.089823	10.110215	10.200038	53				
8	9.800117	9.889682	9.910435	10.089565	10.110318	10.199883	52				
9	9.800272	9.889579	9.910693	10.089307	10.110421	10.199728	51				
10	9.800427	9.889477	9.910951	10.089049	10.110523	10.199573	50				
11	9.800582	9.889374	9.911209	10.088791	10.110626	10.199418	49				
12	9.800737	9.889271	9.911467	10.088533	10.110729	10.199263	48				
13	9.800892	9.889168	9.911725	10.088275	10.110832	10.199108	47				
14	9.801047	9.889064	9.911982	10.088018	10.110936	10.198953	46				
15	9.801201	9.888961	9.912240	10.087760	10.111039	10.198799	45				
16	9.801356	9.888858	9.912498	10.087502	10.111142	10.198644	44				
17	9.801511	9.888755	9.912756	10.087244	10.111245	10.198489	43				
18	9.801665	9.888651	9.913014	10.086986	10.111349	10.198335	42				
19	9.801819	9.888548	9.913271	10.086729	10.111452	10.198181	41				
20	9.801973	9.888444	9.913529	10.086471	10.111556	10.198027	40				
21	9.802128	9.888341	9.913787	10.086213	10.111659	10.197872	39				
22	9.802282	9.888237	9.914044	10.085956	10.111763	10.197718	38				
23	9.802436	9.888134	9.914302	10.085698	10.111866	10.197564	37				
24	9.802589	9.888030	9.914560	10.085440	10.111970	10.197411	36				
25	9.802743	9.887926	9.914817	10.085183	10.112074	10.197257	35				
26	9.802897	9.887822	9.915075	10.084925	10.112178	10.197103	34				
27	9.803050	9.887718	9.915332	10.084668	10.112282	10.196950	33				
28	9.803204	9.887614	9.915590	10.084410	10.112386	10.196796	32				
29	9.803357	9.887510	9.915847	10.084153	10.112490	10.196643	31				
30	9.803511	9.887406	9.916104	10.083896	10.112594	10.196489	30				
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.				
129							Degrees 50				
#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.
60.	155.	103.	258	10.	26.	17.	43	5.	13.	9.	21
50.	129.	86.	215	9.	23.	15.	39	4.	10.	7.	17
40.	103.	69.	172	8.	21.	14.	34	3.	8.	5.	13
30.	77.	52.	129	7.	18.	12.	30	2.	5.	3.	9
20.	52.	34.	86	6.	15.	10.	26	1.	3.	2.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

131

39 Degrees.							140				
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.				
30	9.803511	9.887406	9.916104	10.083896	10.112594	10.196489	30				
31	9.803664	9.887302	9.916362	10.083638	10.112698	10.196336	29				
32	9.803817	9.887198	9.916619	10.083381	10.112802	10.196183	28				
33	9.803970	9.887093	9.916877	10.083123	10.112907	10.196030	27				
34	9.804123	9.886989	9.917134	10.082866	10.113011	10.195877	26				
35	9.804276	9.886885	9.917391	10.082609	10.113115	10.195724	25				
36	9.804428	9.886780	9.917648	10.082352	10.113220	10.195572	24				
37	9.804581	9.886676	9.917906	10.082094	10.113324	10.195419	23				
38	9.804734	9.886571	9.918163	10.081837	10.113429	10.195266	22				
39	9.804886	9.886466	9.918420	10.081580	10.113534	10.195114	21				
40	9.805039	9.886362	9.918677	10.081323	10.113638	10.194961	20				
41	9.805191	9.886257	9.918934	10.081066	10.113743	10.194809	19				
42	9.805343	9.886152	9.919191	10.080809	10.113848	10.194657	18				
43	9.805495	9.886047	9.919448	10.080552	10.113953	10.194505	17				
44	9.805647	9.885942	9.919705	10.080295	10.114058	10.194353	16				
45	9.805799	9.885837	9.919962	10.080038	10.114163	10.194201	15				
46	9.805951	9.885732	9.920219	10.079781	10.114268	10.194049	14				
47	9.806103	9.885627	9.920476	10.079524	10.114373	10.193897	13				
48	9.806254	9.885522	9.920733	10.079267	10.114478	10.193746	12				
49	9.806406	9.885416	9.920990	10.079010	10.114584	10.193594	11				
50	9.806557	9.885311	9.921247	10.078753	10.114689	10.193443	10				
51	9.806709	9.885205	9.921503	10.078497	10.114795	10.193291	9				
52	9.806860	9.885100	9.921760	10.078240	10.114900	10.193140	8				
53	9.807011	9.884994	9.922017	10.077983	10.115006	10.192986	7				
54	9.807163	9.884889	9.922274	10.077726	10.115111	10.192837	6				
55	9.807314	9.884783	9.922530	10.077470	10.115217	10.192686	5				
56	9.807465	9.884677	9.922787	10.077213	10.115323	10.192535	4				
57	9.807615	9.884572	9.923044	10.076956	10.115428	10.192385	3				
58	9.807766	9.884466	9.923300	10.076700	10.115534	10.192234	2				
59	9.807917	9.884360	9.923557	10.076443	10.115640	10.192083	1				
60	9.808067	9.884254	9.923814	10.076186	10.115746	10.191933	0				
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.				
129							Degrees 50				
"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	152.	105.	257	10.	25.	18.	43	5.	13.	9.	21
50.	127.	88.	214	9.	22.	16.	39	4.	10.	7.	17
40.	101.	70.	171	8.	20.	14.	34	3.	8.	5.	13
30.	76.	53.	129	7.	18.	12.	30	2.	5.	4.	9
20.	51.	35.	86	6.	15.	10.	26	1.	3.	2.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

132 Log. Sines, Tangents, Secants, &c

40 Degrees.							139
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	Min.
0	9.808067	9.884254	9.923814	10.076186	10.115746	10.191933	60
1	9.808218	9.884148	9.924070	10.075930	10.115852	10.191782	59
2	9.808368	9.884042	9.924327	10.075673	10.115958	10.191632	58
3	9.808519	9.883936	9.924583	10.075417	10.116064	10.191481	57
4	9.808669	9.883829	9.924840	10.075160	10.116171	10.191331	56
5	9.808819	9.883723	9.925096	10.074904	10.116277	10.191181	55
6	9.808969	9.883617	9.925352	10.074648	10.116383	10.191031	54
7	9.809119	9.883510	9.925609	10.074391	10.116490	10.190881	53
8	9.809269	9.883404	9.925865	10.074135	10.116596	10.190731	52
9	9.809419	9.883297	9.926122	10.073878	10.116703	10.190581	51
10	9.809569	9.883191	9.926378	10.073622	10.116809	10.190431	50
11	9.809718	9.883084	9.926634	10.073366	10.116916	10.190282	49
12	9.809868	9.882977	9.926890	10.073110	10.117023	10.190132	48
13	9.810017	9.882871	9.927147	10.072853	10.117129	10.189983	47
14	9.810167	9.882764	9.927403	10.072597	10.117236	10.189833	46
15	9.810316	9.882657	9.927659	10.072341	10.117343	10.189684	45
16	9.810465	9.882550	9.927915	10.072085	10.117450	10.189535	44
17	9.810614	9.882443	9.928171	10.071829	10.117557	10.189386	43
18	9.810763	9.882336	9.928427	10.071573	10.117664	10.189237	42
19	9.810912	9.882229	9.928684	10.071316	10.117771	10.189088	41
20	9.811061	9.882121	9.928940	10.071060	10.117879	10.188939	40
21	9.811210	9.882014	9.929196	10.070804	10.117986	10.188790	39
22	9.811358	9.881907	9.929452	10.070548	10.118093	10.188642	38
23	9.811507	9.881799	9.929708	10.070292	10.118201	10.188493	37
24	9.811655	9.881692	9.929964	10.070036	10.118308	10.188345	36
25	9.811804	9.881584	9.930220	10.069780	10.118416	10.188196	35
26	9.811952	9.881477	9.930475	10.069525	10.118523	10.188048	34
27	9.812100	9.881369	9.930731	10.069269	10.118631	10.187900	33
28	9.812248	9.881261	9.930987	10.069013	10.118739	10.187752	32
29	9.812396	9.881153	9.931243	10.068757	10.118847	10.187604	31
30	9.812544	9.881046	9.931499	10.068501	10.118954	10.187456	30
Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	10. Co-ar.	Min.

130 Degrees 49

"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.	"	Sine.	Co-f.	Tang.
60.	149.	107.	256	10.	25.	18.	43	5.	12.	9.	21
50.	124.	89.	214	9.	22.	16.	38	4.	10.	7.	17
40.	99.	71.	171	8.	20.	14.	34	3.	7.	5.	13
30.	75.	53.	128	7.	17.	12.	30	2.	5.	4.	9
20.	50.	36.	85	6.	15.	11.	26	1.	2.	2.	4
Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.		Co-f.	Sine.	Tang.	

Degrees.							139
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.812544	9.881046	9.931499	10.068501	10.118954	10.187456	30
31	9.812692	9.880938	9.931755	10.068245	10.119062	10.187308	29
32	9.812840	9.880830	9.932010	10.067990	10.119170	10.187160	28
33	9.812988	9.880722	9.932266	10.067734	10.119278	10.187012	27
34	9.813135	9.880613	9.932522	10.067478	10.119387	10.186865	26
35	9.813283	9.880505	9.932778	10.067222	10.119495	10.186717	25
36	9.813430	9.880397	9.933033	10.066967	10.119603	10.186570	24
37	9.813578	9.880289	9.933289	10.066711	10.119711	10.186422	23
38	9.813725	9.880180	9.933545	10.066455	10.119820	10.186275	22
39	9.813872	9.880072	9.933800	10.066200	10.119928	10.186128	21
40	9.814019	9.879963	9.934056	10.065944	10.120037	10.185981	20
41	9.814166	9.879855	9.934311	10.065689	10.120145	10.185834	19
42	9.814313	9.879746	9.934567	10.065433	10.120254	10.185687	18
43	9.814460	9.879637	9.934822	10.065178	10.120363	10.185540	17
44	9.814607	9.879529	9.935078	10.064922	10.120471	10.185393	16
45	9.814753	9.879420	9.935333	10.064667	10.120580	10.185247	15
46	9.814900	9.879311	9.935589	10.064411	10.120689	10.185100	14
47	9.815046	9.879202	9.935844	10.064156	10.120798	10.184954	13
48	9.815193	9.879093	9.936100	10.063900	10.120907	10.184807	12
49	9.815339	9.878984	9.936355	10.063645	10.121016	10.184661	11
50	9.815485	9.878875	9.936611	10.063389	10.121125	10.184515	10
51	9.815632	9.878766	9.936866	10.063134	10.121234	10.184368	9
52	9.815778	9.878656	9.937121	10.062879	10.121344	10.184222	8
53	9.815924	9.878547	9.937377	10.062623	10.121453	10.184076	7
54	9.816069	9.878438	9.937632	10.062368	10.121562	10.183931	6
55	9.816215	9.878328	9.937887	10.062113	10.121672	10.183785	5
56	9.816361	9.878219	9.938142	10.061858	10.121781	10.183639	4
57	9.816507	9.878109	9.938398	10.061602	10.121891	10.183493	3
58	9.816652	9.877999	9.938653	10.061347	10.122001	10.183348	2
59	9.816798	9.877890	9.938908	10.061092	10.122110	10.183202	1
60	9.816943	9.877780	9.939163	10.060837	10.122220	10.183057	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
130							130

Degrees 40

"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.
60.	146.	109.	255	10.	24.	18.	43	5.	12.	9.	21
50.	122.	91.	213	9.	22.	16.	38	4.	10.	7.	17
40.	98.	73.	170	8.	20.	15.	34	3.	7.	5.	13
30.	73.	54.	128	7.	17.	13.	30	2.	5.	4.	9
20.	49.	36.	85	6.	15.	11.	26	1.	2.	2.	4
	Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.

41 Degrees.

138

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.816943	9.877780	9.939163	10.060837	10.122220	10.183057	60
1	9.817088	9.877670	9.939418	10.060582	10.122330	0.182912	59
2	9.817233	9.877560	9.939673	10.060327	10.122440	10.182767	58
3	9.817379	9.877450	9.939928	10.060072	10.122550	10.182621	57
4	9.817524	9.877340	9.940183	10.059817	10.122660	10.182476	56
5	9.817668	9.877230	9.940439	10.059561	10.122770	10.182332	55
6	9.817813	9.877120	9.940694	10.059306	10.122880	10.182187	54
7	9.817958	9.877010	9.940949	10.059051	10.122990	10.182042	53
8	9.818103	9.876899	9.941204	10.058796	10.123101	10.181897	52
9	9.818247	9.876789	9.941459	10.058541	10.123211	10.181753	51
10	9.818392	9.876678	9.941713	10.058287	10.123322	10.181608	50
11	9.818536	9.876568	9.941968	10.058032	10.123432	10.181464	49
12	9.818681	9.876457	9.942223	10.057777	10.123543	10.181319	48
13	9.818825	9.876347	9.942478	10.057522	10.123653	10.181175	47
14	9.818969	9.876236	9.942733	10.057267	10.123764	10.181031	46
15	9.819113	9.876125	9.942988	10.057012	10.123875	10.180887	45
16	9.819257	9.876014	9.943243	10.056757	10.123986	10.180743	44
17	9.819401	9.875904	9.943498	10.056502	10.124096	10.180599	43
18	9.819545	9.875793	9.943752	10.056248	10.124207	10.180455	42
19	9.819689	9.875682	9.944007	10.055993	10.124318	10.180311	41
20	9.819832	9.875571	9.944262	10.055738	10.124429	10.180168	40
21	9.819976	9.875459	9.944517	10.055483	10.124541	10.180024	39
22	9.820120	9.875348	9.944771	10.055229	10.124652	10.179880	38
23	9.820263	9.875237	9.945026	10.054974	10.124763	10.179737	37
24	9.820406	9.875126	9.945281	10.054719	10.124874	10.179594	36
25	9.820550	9.875014	9.945535	10.054465	10.124986	10.179450	35
26	9.820693	9.874903	9.945790	10.054210	10.125097	10.179307	34
27	9.820836	9.874791	9.946045	10.053955	10.125209	10.179164	33
28	9.820979	9.874680	9.946299	10.053701	10.125320	10.179021	32
29	9.821122	9.874568	9.946554	10.053446	10.125432	10.178878	31
30	9.821265	9.874456	9.946808	10.053192	10.125544	10.178735	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

131

Degrees 48

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	144.	111.	255	10.	24.	18.	42	5.	12.	9.	21
50.	120.	92.	212	9.	22.	17.	38	4.	10.	7.	17
40.	96.	74.	170	8.	19.	15.	34	3.	7.	6.	13
30.	72.	55.	127	7.	17.	13.	30	2.	5.	4.	9
20.	48.	37.	85	6.	14.	11.	25	1.	2.	2.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

135

41 Degrees.

138

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.821265	9.874456	9.946808	10.053192	10.125544	10.178735	30
31	9.821407	9.874344	9.947063	10.052937	10.125656	10.178593	29
32	9.821550	9.874232	9.947318	10.052682	10.125768	10.178450	28
33	9.821693	9.874121	9.947572	10.052428	10.125879	10.178307	27
34	9.821835	9.874009	9.947827	10.052173	10.125991	10.178165	26
35	9.821977	9.873896	9.948081	10.051919	10.126104	10.178023	25
36	9.822120	9.873784	9.948335	10.051665	10.126216	10.177880	24
37	9.822262	9.873672	9.948590	10.051410	10.126328	10.177738	23
38	9.822404	9.873560	9.948844	10.051156	10.126440	10.177596	22
39	9.822546	9.873448	9.949099	10.050901	10.126552	10.177454	21
40	9.822688	9.873335	9.949353	10.050647	10.126665	10.177312	20
41	9.822830	9.873223	9.949608	10.050392	10.126777	10.177170	19
42	9.822972	9.873110	9.949862	10.050138	10.126890	10.177028	18
43	9.823114	9.872998	9.950116	10.049884	10.127002	10.176886	17
44	9.823255	9.872885	9.950371	10.049629	10.127115	10.176745	16
45	9.823397	9.872772	9.950625	10.049375	10.127228	10.176603	15
46	9.823539	9.872659	9.950879	10.049121	10.127341	10.176461	14
47	9.823680	9.872547	9.951133	10.048867	10.127453	10.176320	13
48	9.823821	9.872434	9.951388	10.048612	10.127566	10.176179	12
49	9.823963	9.872321	9.951642	10.048358	10.127679	10.176037	11
50	9.824104	9.872208	9.951896	10.048104	10.127792	10.175896	10
51	9.824245	9.872095	9.952150	10.047850	10.127905	10.175755	9
52	9.824386	9.871981	9.952405	10.047595	10.128019	10.175614	8
53	9.824527	9.871868	9.952659	10.047341	10.128132	10.175473	7
54	9.824668	9.871754	9.952913	10.047087	10.128245	10.175332	6
55	9.824808	9.871641	9.953167	10.046833	10.128359	10.175192	5
56	9.824949	9.871528	9.953421	10.046579	10.128472	10.175051	4
57	9.825090	9.871414	9.953675	10.046325	10.128586	10.174910	3
58	9.825230	9.871301	9.953929	10.046071	10.128699	10.174770	2
59	9.825371	9.871187	9.954183	10.045817	10.128813	10.174629	1
60	9.825511	9.871073	9.954437	10.045563	10.128927	10.174489	0

Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.
131							Degrees 48

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	142.	113.	254.	10.	24.	19.	42.	5.	12.	9.	21.
50.	118.	94.	212.	9.	21.	17.	38.	4.	9.	8.	17.
40.	94.	75.	170.	8.	19.	15.	34.	3.	7.	6.	13.
30.	71.	56.	127.	7.	17.	13.	30.	2.	5.	4.	8.
20.	47.	38.	85.	6.	14.	13.	25.	1.	2.	2.	4.
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

42 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.825511	9.871073	9.954437	10.045563	10.128927	10.174489	60
1	9.825651	9.870960	9.954691	10.045309	10.129040	10.174349	59
2	9.825791	9.870846	9.954946	10.045054	10.129154	10.174209	58
3	9.825931	9.870734	9.955200	10.044800	10.129268	10.174069	57
4	9.826071	9.870618	9.955454	10.044546	10.129382	10.173929	56
5	9.826211	9.870504	9.955708	10.044292	10.129496	10.173789	55
6	9.826351	9.870390	9.955961	10.044039	10.129610	10.173649	54
7	9.826491	9.870276	9.956215	10.043785	10.129724	10.173509	53
8	9.826631	9.870161	9.956469	10.043531	10.129839	10.173369	52
9	9.826770	9.870047	9.956723	10.043277	10.129953	10.173229	51
10	9.826910	9.869933	9.956977	10.043023	10.130067	10.173090	50
11	9.827049	9.869818	9.957231	10.042769	10.130182	10.172951	49
12	9.827189	9.869704	9.957485	10.042515	10.130296	10.172811	48
13	9.827328	9.869589	9.957739	10.042261	10.130411	10.172672	47
14	9.827467	9.869474	9.957993	10.042007	10.130526	10.172533	46
15	9.827606	9.869360	9.958247	10.041753	10.130640	10.172394	45
16	9.827745	9.869245	9.958500	10.041500	10.130755	10.172255	44
17	9.827884	9.869130	9.958754	10.041246	10.130870	10.172116	43
18	9.828023	9.869015	9.959008	10.040992	10.130985	10.171977	42
19	9.828162	9.868900	9.959262	10.040738	10.131100	10.171838	41
20	9.828301	9.868785	9.959516	10.040484	10.131215	10.171699	40
21	9.828439	9.868670	9.959769	10.040231	10.131330	10.171561	39
22	9.828578	9.868555	9.960023	10.039977	10.131445	10.171422	38
23	9.828716	9.868440	9.960277	10.039723	10.131560	10.171284	37
24	9.828855	9.868324	9.960530	10.039470	10.131676	10.171145	36
25	9.828993	9.868209	9.960784	10.039216	10.131791	10.171007	35
26	9.829131	9.868093	9.961038	10.038962	10.131907	10.170869	34
27	9.829269	9.867978	9.961292	10.038708	10.132022	10.170731	33
28	9.829407	9.867862	9.961545	10.038455	10.132138	10.170593	32
29	9.829545	9.867747	9.961799	10.038201	10.132253	10.170455	31
30	9.829683	9.867631	9.962052	10.037948	10.132369	10.170317	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					o. Co-ar.		

Degrees 47

#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.
10.	139.	115.	254	10.	23.	19.	42	5.	12.	10.	21
20.	146.	96.	212	9.	21.	17.	38	4.	9.	8.	17
30.	93.	77.	169	8.	19.	15.	34	3.	7.	6.	13
40.	70.	57.	127	7.	16.	13.	30	2.	5.	4.	8
50.	46.	38.	85	6.	14.	11.	25	1.	2.	2.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log: Sines, Tangents, Secants, &c.

137

42 Degrees.

Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	o. Co-ar.	Min.
30	9.819683	9.867631	9.962052	10.037948	10.132369	10.170317		30
31	9.820821	9.867515	9.962306	10.037694	10.132485	10.170179		29
32	9.822959	9.867399	9.962560	10.037440	10.132601	10.170041		28
33	9.830097	9.867283	9.962813	10.037187	10.132717	10.169903		27
34	9.830234	9.867167	9.963067	10.036933	10.132833	10.169766		26
35	9.830372	9.867051	9.963320	10.036680	10.132949	10.169628		15
36	9.830509	9.866935	9.963574	10.036426	10.133055	10.169491		14
37	9.830646	9.866819	9.963828	10.036172	10.133181	10.169354		23
38	9.830784	9.866703	9.964081	10.035919	10.133297	10.169216		22
39	9.830921	9.866586	9.964335	10.035665	10.133414	10.169079		21
40	9.831058	9.866470	9.964588	10.035412	10.133530	10.168942		20
41	9.831195	9.866353	9.964842	10.035158	10.133647	10.168805		19
42	9.831332	9.866237	9.965095	10.034905	10.133763	10.168668		18
43	9.831469	9.866120	9.965349	10.034651	10.133880	10.168531		17
44	9.831606	9.866004	9.965602	10.034398	10.133996	10.168394		16
45	9.831742	9.865887	9.965855	10.034145	10.134113	10.168258		15
46	9.831879	9.865770	9.966109	10.033891	10.134230	10.168121		14
47	9.832015	9.865653	9.966362	10.033638	10.134347	10.167985		13
48	9.832152	9.865536	9.966616	10.033384	10.134464	10.167848		12
49	9.832288	9.865419	9.966869	10.033131	10.134581	10.167712		11
50	9.832425	9.865302	9.967123	10.032877	10.134698	10.167575		10
51	9.832561	9.865185	9.967376	10.032624	10.134815	10.167439		9
52	9.832697	9.865068	9.967629	10.032371	10.134932	10.167303		8
53	9.832833	9.864950	9.967883	10.032117	10.135050	10.167167		7
54	9.832969	9.864833	9.968136	10.031864	10.135167	10.167031		6
55	9.833105	9.864716	9.968389	10.031611	10.135284	10.166895		5
56	9.833241	9.864598	9.968643	10.031357	10.135402	10.166759		4
57	9.833377	9.864481	9.968896	10.031104	10.135519	10.166623		3
58	9.833512	9.864363	9.969149	10.030851	10.135637	10.166488		2
59	9.833648	9.864245	9.969403	10.030597	10.135755	10.166352		1
60	9.833783	9.864127	9.969656	10.030344	10.135873	10.166217		0
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant	o. Co-ar.	Min.

132

Degrees 47

Sine.	Co-f.	Tang.	Sine.	Co-f.	Tang.	Sine.	Co-f.	Tang.
60.	117.	253	10.	23.	19.	42	5.	11.
50.	114.	97.	211	9.	20.	18.	38	4.
40.	97.	78.	169	8.	18.	16.	34	3.
30.	68.	58.	127	7.	16.	14.	30	2.
20.	46.	39.	84	6.	14.	12.	25	1.
Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.	Co-f.	Sine.	Tang.

T

138. Log. Sines, Tangents, Secants. &c.

43 Degrees.							136	
Min.	Sine.	Co-fine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.	
0	9.833783	9.864127	9.969656	10.030344	10.135873	10.166217	60	
1	9.833919	9.864010	9.969909	10.030091	10.135990	10.166081	59	
2	9.834054	9.863892	9.970162	10.029838	10.136108	10.165946	58	
3	9.834189	9.863774	9.970416	10.029584	10.136226	10.165811	57	
4	9.834325	9.863656	9.970669	10.029331	10.136344	10.165675	56	
5	9.834460	9.863538	9.970922	10.029078	10.136462	10.165540	55	
6	9.834595	9.863419	9.971175	10.028825	10.136581	10.165405	54	
7	9.834730	9.863301	9.971429	10.028571	10.136699	10.165270	53	
8	9.834865	9.863183	9.971682	10.028318	10.136817	10.165135	52	
9	9.834999	9.863064	9.971935	10.028065	10.136936	10.165001	51	
10	9.835134	9.862946	9.972188	10.027812	10.137054	10.164866	50	
11	9.835269	9.862827	9.972441	10.027559	10.137173	10.164731	49	
12	9.835403	9.862709	9.972695	10.027305	10.137291	10.164597	48	
13	9.835538	9.862590	9.972948	10.027052	10.137410	10.164462	47	
14	9.835672	9.862471	9.973201	10.026799	10.137529	10.164328	46	
15	9.835807	9.862353	9.973454	10.026546	10.137647	10.164193	45	
16	9.835941	9.862234	9.973707	10.026293	10.137766	10.164059	44	
17	9.836075	9.862115	9.973960	10.026040	10.137885	10.163925	43	
18	9.836209	9.861996	9.974213	10.025787	10.138004	10.163791	42	
19	9.836343	9.861877	9.974466	10.025534	10.138123	10.163657	41	
20	9.836477	9.861758	9.974720	10.025280	10.138242	10.163523	40	
21	9.836611	9.861638	9.974973	10.025027	10.138362	10.163389	39	
22	9.836745	9.861519	9.975226	10.024774	10.138481	10.163255	38	
23	9.836878	9.861400	9.975479	10.024521	10.138600	10.163122	37	
24	9.837012	9.861280	9.975732	10.024268	10.138720	10.162988	36	
25	9.837146	9.861161	9.975985	10.024015	10.138839	10.162854	35	
26	9.837279	9.861041	9.976238	10.023762	10.138959	10.162721	34	
27	9.837412	9.860922	9.976491	10.023509	10.139078	10.162588	33	
28	9.837546	9.860802	9.976744	10.023256	10.139198	10.162454	32	
29	9.837679	9.860682	9.976997	10.023003	10.139318	10.162321	31	
30	9.837812	9.860562	9.977250	10.022750	10.139438	10.162188	30	
Min.	Co-fine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.	
133							Degrees 46	
#	Sine.	Co-fi.	Tang.	#	Sine.	Co-fi.	Tang.	
60.	134.	119.	253	10.	22.	20.	42	
50.	112.	99.	211	9.	20.	18.	38	
40.	89.	79.	169	8.	18.	16.	34	
30.	67.	59.	127	7.	16.	14.	30	
20.	45.	40.	84	6.	13.	12.	25	
Co-fi. Sine. Tang.			Co-fi. Sine. Tang.			Co-fi. Sine. Tang.		
5.	11.	10.	21	5.	11.	10.	21	
4.	9.	8.	17	4.	9.	8.	17	
3.	7.	6.	13	3.	7.	6.	13	
2.	4.	4.	8	2.	4.	4.	8	
1.	2.	2.	4	1.	2.	2.	4	

Log. Sines, Tangents, Secants, &c.

139

43 Degrees.							136
Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec.	Min.
30	9.837812	9.860562	9.977250	10.022750	10.139438	10.162188	30
31	9.837945	9.860442	9.977503	10.022497	10.139558	10.162055	29
32	9.838078	9.860322	9.977756	10.022244	10.139678	10.161922	28
33	9.838211	9.860202	9.978009	10.021991	10.139798	10.161789	27
34	9.838344	9.860082	9.978262	10.021738	10.139918	10.161656	26
35	9.838477	9.859962	9.978515	10.021485	10.140038	10.161523	25
36	9.838610	9.859842	9.978768	10.021232	10.140158	10.161390	24
37	9.838742	9.859721	9.979021	10.020979	10.140279	10.161258	23
38	9.838875	9.859601	9.979274	10.020726	10.140399	10.161125	22
39	9.839007	9.859480	9.979527	10.020473	10.140520	10.160993	21
40	9.839140	9.859360	9.979780	10.020220	10.140640	10.160860	20
41	9.839272	9.859239	9.980033	10.019967	10.140761	10.160728	19
42	9.839404	9.859119	9.980286	10.019714	10.140881	10.160596	18
43	9.839536	9.858998	9.980538	10.019462	10.141002	10.160464	17
44	9.839668	9.858877	9.980791	10.019209	10.141123	10.160332	16
45	9.839800	9.858756	9.981044	10.018956	10.141244	10.160200	15
46	9.839932	9.858635	9.981297	10.018703	10.141365	10.160068	14
47	9.840064	9.858514	9.981550	10.018450	10.141486	10.159936	13
48	9.840196	9.858393	9.981803	10.018197	10.141607	10.159804	12
49	9.840328	9.858272	9.982056	10.017944	10.141728	10.159672	11
50	9.840459	9.858151	9.982309	10.017691	10.141849	10.159541	10
51	9.840591	9.858029	9.982562	10.017438	10.141971	10.159409	9
52	9.840722	9.857908	9.982814	10.017186	10.142092	10.159278	8
53	9.840854	9.857786	9.983067	10.016933	10.142214	10.159146	7
54	9.840985	9.857665	9.983320	10.016680	10.142335	10.159015	6
55	9.841116	9.857543	9.983573	10.016427	10.142457	10.158884	5
56	9.841247	9.857422	9.983826	10.016174	10.142578	10.158753	4
57	9.841378	9.857300	9.984079	10.015921	10.142700	10.158622	3
58	9.841509	9.857178	9.984332	10.015668	10.142822	10.158491	2
59	9.841640	9.857056	9.984584	10.015416	10.142944	10.158360	1
60	9.841771	9.856934	9.984837	10.015163	10.143066	10.158229	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec.	Secant.	Min.
					o. Co-ar.		

133

Degrees 46

"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.	"	Sine.	Co-sine.	Tang.
60.	132.	121.	253	10.	22.	20.	42	5.	11.	10.	21
50.	110.	101.	211	9.	19.	18.	38	4.	9.	8.	17
40.	88.	81.	169	8.	17.	16.	34	3.	7.	6.	13
30.	66.	60.	126	7.	15.	14.	29	2.	4.	4.	8
20.	44.	40.	84	6.	13.	12.	25	1.	2.	2.	4
	Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.		Co-sine.	Sine.	Tang.

44 Degrees.

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
0	9.841771	9.856934	9.984837	10.015163	10.143066	10.158229	60
1	9.841902	9.856812	9.985090	10.014910	10.143188	10.158098	59
2	9.842033	9.856690	9.985343	10.014657	10.143310	10.157967	58
3	9.842163	9.856568	9.985596	10.014404	10.143432	10.157837	57
4	9.842294	9.856446	9.985848	10.014151	10.143554	10.157706	56
5	9.842424	9.856323	9.986101	10.013899	10.143677	10.157576	55
6	9.842555	9.856201	9.986354	10.013646	10.143799	10.157445	54
7	9.842685	9.856078	9.986607	10.013393	10.143922	10.157315	53
8	9.842815	9.855956	9.986860	10.013140	10.144044	10.157185	52
9	9.842946	9.855833	9.987112	10.012888	10.144167	10.157054	51
10	9.843076	9.855711	9.987365	10.012635	10.144289	10.156924	50
11	9.843206	9.855588	9.987618	10.012382	10.144412	10.156794	49
12	9.843336	9.855465	9.987871	10.012129	10.144535	10.156664	48
13	9.843466	9.855342	9.988123	10.011877	10.144658	10.156534	47
14	9.843595	9.855219	9.988376	10.011624	10.144781	10.156405	46
15	9.843725	9.855096	9.988629	10.011371	10.144904	10.156275	45
16	9.843855	9.854973	9.988882	10.011118	10.145027	10.156145	44
17	9.843984	9.854850	9.989134	10.010866	10.145150	10.156016	43
18	9.844114	9.854727	9.989387	10.010613	10.145273	10.155886	42
19	9.844243	9.854603	9.989640	10.010360	10.145397	10.155757	41
20	9.844372	9.854480	9.989893	10.010107	10.145520	10.155628	40
21	9.844502	9.854356	9.990145	10.009855	10.145644	10.155498	39
22	9.844631	9.854233	9.990398	10.009602	10.145767	10.155369	38
23	9.844760	9.854109	9.990651	10.009349	10.145891	10.155240	37
24	9.844889	9.853986	9.990903	10.009097	10.146014	10.155111	36
25	9.845018	9.853862	9.991156	10.008844	10.146138	10.154982	35
26	9.845147	9.853738	9.991409	10.008591	10.146262	10.154853	34
27	9.845276	9.853614	9.991662	10.008338	10.146386	10.154724	33
28	9.845405	9.853490	9.991914	10.008086	10.146510	10.154595	32
29	9.845533	9.853366	9.992167	10.007833	10.146634	10.154467	31
30	9.845662	9.853242	9.992420	10.007580	10.146758	10.154338	30
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

134

Degrees 45

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	130.	123.	253	10.	22.	21.	42	5.	11.	10.	21
50.	108.	103.	211	9.	19.	18.	38	4.	9.	8.	17
40.	86.	82.	168	8.	17.	16.	34	3.	6.	6.	13
30.	65.	62.	126	7.	15.	14.	29	2.	4.	4.	8
20.	43.	41.	84	6.	13.	12.	25	1.	2.	2.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

Log. Sines, Tangents, Secants, &c.

147

44 Degrees.

135

Min.	Sine.	Co-sine.	Tangent.	Co-tang.	Secant.	10. Co-sec. o. Co-ar.	Min.
30	9.845662	9.853242	9.992420	10.007580	10.146758	10.154338	30
31	9.845790	9.853118	9.992672	10.007328	10.146882	10.154210	29
32	9.845919	9.852994	9.992925	10.007075	10.147006	10.154081	28
33	9.846047	9.852869	9.993173	10.006822	10.147131	10.153953	27
34	9.846175	9.852745	9.993431	10.006569	10.147255	10.153825	26
35	9.846304	9.852620	9.993683	10.006317	10.147380	10.153696	25
36	9.846432	9.852496	9.993936	10.006064	10.147504	10.153568	24
37	9.846560	9.852371	9.994189	10.005811	10.147629	10.153440	23
38	9.846688	9.852247	9.994441	10.005559	10.147753	10.153312	22
39	9.846816	9.852122	9.994694	10.005306	10.147878	10.153184	21
40	9.846944	9.851997	9.994947	10.005053	10.148003	10.153056	20
41	9.847071	9.851872	9.995199	10.004801	10.148128	10.152929	19
42	9.847199	9.851747	9.995452	10.004548	10.148253	10.152801	18
43	9.847327	9.851622	9.995705	10.004295	10.148378	10.152673	17
44	9.847454	9.851497	9.995957	10.004043	10.148503	10.152546	16
45	9.847582	9.851372	9.996210	10.003790	10.148628	10.152418	15
46	9.847709	9.851246	9.996463	10.003537	10.148754	10.152291	14
47	9.847836	9.851121	9.996715	10.003285	10.148879	10.152164	13
48	9.847964	9.850996	9.996968	10.003032	10.149004	10.152036	12
49	9.848091	9.850870	9.997221	10.002779	10.149130	10.151909	11
50	9.848218	9.850745	9.997473	10.002527	10.149255	10.151782	10
51	9.848345	9.850619	9.997726	10.002274	10.149381	10.151655	9
52	9.848472	9.850493	9.997979	10.002021	10.149507	10.151528	8
53	9.848599	9.850368	9.998231	10.001769	10.149632	10.151401	7
54	9.848726	9.850242	9.998484	10.001516	10.149758	10.151274	6
55	9.848852	9.850116	9.998737	10.001263	10.149884	10.151148	5
56	9.848979	9.849990	9.998989	10.001011	10.150010	10.151021	4
57	9.849106	9.849864	9.999242	10.000758	10.150136	10.150894	3
58	9.849232	9.849738	9.999495	10.000505	10.150262	10.150768	2
59	9.849359	9.849611	9.999747	10.000253	10.150389	10.150641	1
60	9.849485	9.849485	10.000000	10.000000	10.150515	10.150515	0
Min.	Co-sine.	Sine.	Co-tang.	Tangent.	10. Co-sec. o. Co-ar.	Secant.	Min.

134

Degrees 45

"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.	"	Sine.	Co-fi.	Tang.
60.	127.	125.	253	10.	21.	21.	42	5.	11.	10.	21
50.	106.	104.	211	9.	19.	19.	38	4.	8.	8.	17
40.	85.	83.	168	8.	17.	17.	34	3.	6.	6.	13
30.	64.	63.	126	7.	16.	15.	29	2.	4.	4.	8
20.	42.	42.	84	6.	13.	13.	25	1.	2.	2.	4
	Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.		Co-fi.	Sine.	Tang.

142 Differences of Log. Sines, Tangents, Secants, &c.

Deg. M.	Sine.	Co.-fi.	Tang.	Sine.	Co.-fi.	Tang.	Sine.	Co.-fi.	Tang.
0				10. 41393.	0.	41393	20. 21189.	1.	21190
1. 0.	7178.	2.	7180	10. 6160.	3.	6162	20. 5394.	3.	5397
2. 0.	3602.	5.	3607	10. 3326.	5.	3331	20. 3089.	5.	3095
3. 0.	2404.	7.	2410	10. 2277.	7.	2285	20. 2164.	7.	2171
4. 0.	1803.	9.	1812	10. 1731.	9.	1740	20. 1664.	10.	1680
5. 0.	1442.	11.	1453	10. 1395.	11.	1406	20. 1351.	12.	1363
6. 0.	1200.	13.	1214	10. 1168.	14.	1181	20. 1137.	14.	1151
7. 0.	1028.	16.	1043	10. 1004.	16.	1019	20. 980.	16.	997
8. 0.	898.	18.	916	10. 879.	18.	899	20. 862.	18.	882
9. 0.	797.	20.	817	10. 782.	20.	803	20. 768.	21.	780
10. 0.	716.	22.	738	10. 704.	23.	727	20. 692.	23.	715
11. 0.	650.	25.	674	10. 640.	25.	665	20. 630.	25.	655
12. 0.	594.	27.	621	10. 586.	27.	613	20. 577.	28.	605
13. 0.	547.	29.	576	10. 540.	30.	569	20. 533.	30.	563
14. 0.	506.	31.	538	10. 500.	32.	532	20. 494.	32.	520
15. 0.	471.	34.	505	10. 466.	34.	500	20. 480.	35.	495
16. 0.	440.	36.	477	10. 436.	37.	472	20. 431.	37.	468
17. 0.	413.	39.	452	10. 409.	39.	448	20. 405.	39.	444
18. 0.	389.	41.	430	10. 385.	41.	426	20. 381.	42.	423
19. 0.	367.	44.	410	10. 363.	44.	407	20. 360.	44.	404
20. 0.	347.	46.	393	10. 344.	46.	361	20. 341.	47.	388
21. 0.	329.	48.	378	10. 326.	49.	375	20. 323.	49.	373
22. 0.	313.	51.	364	10. 310.	51.	361	20. 307.	52.	359
23. 0.	298.	54.	351	10. 295.	54.	349	20. 293.	55.	347
24. 0.	284.	56.	340	10. 281.	57.	338	20. 279.	57.	336
25. 0.	271.	59.	330	10. 269.	59.	328	20. 267.	60.	327
26. 0.	259.	62.	320	10. 257.	62.	319	20. 255.	63.	318
27. 0.	248.	64.	312	10. 246.	65.	311	20. 244.	65.	310
28. 0.	237.	67.	305	10. 236.	68.	304	20. 234.	68.	302
29. 0.	228.	70.	298	10. 226.	71.	297	20. 225.	71.	296
30. 0.	219.	73.	292	10. 217.	73.	291	20. 216.	74.	290
31. 0.	210.	76.	286	10. 209.	76.	285	20. 207.	77.	284
32. 0.	202.	79.	281	10. 201.	79.	280	20. 200.	80.	280
33. 0.	194.	82.	277	10. 193.	83.	276	20. 192.	83.	275
34. 0.	187.	85.	272	10. 186.	86.	272	20. 185.	86.	271
35. 0.	180.	88.	269	10. 179.	89.	268	20. 178.	90.	268
36. 0.	174.	92.	266	10. 173.	92.	265	20. 172.	93.	265
37. 0.	168.	95.	263	10. 167.	96.	262	20. 166.	96.	262
38. 0.	162.	99.	260	10. 161.	99.	260	20. 160.	100.	260
39. 0.	156.	102.	258	10. 155.	103.	258	20. 154.	104.	258
40. 0.	150.	106.	257	10. 150.	106.	256	20. 149.	107.	256
41. 0.	145.	110.	255	10. 145.	110.	255	20. 144.	111.	255
42. 0.	140.	114.	254	10. 139.	114.	254	20. 139.	115.	254
43. 0.	135.	118.	253	10. 135.	118.	253	20. 134.	119.	253
44. 0.	131.	122.	253	10. 130.	123.	253	20. 129.	123.	253

to every Ten Minutes of a Degree.

143

	Sine.	Co.-s.	Tang.		Sine.	Co.-s.	Tang.		Sine.	Co.-s.	Tang.
0. 30.	14240.	1.	14241	40.	10723.	1.	10725	50.	8600.	2.	8602
1. 30.	4798.	3.	4801	40.	4320.	4.	4324	50.	3929.	4.	3933
2. 30.	2884.	6.	2889	40.	2404.	6.	2710	50.	2545.	6.	2551
3. 30.	2061.	8.	2068	40.	1967.	8.	1975	50.	1881.	9.	1890
4. 30.	1602.	10.	1612	40.	1545.	10.	1555	50.	1491.	11.	1502
5. 30.	1310.	12.	1322	40.	1271.	13.	1284	50.	1235.	13.	1248
6. 30.	1107.	14.	1122	40.	1080.	15.	1094	50.	1053.	15.	1068
7. 30.	959.	17.	975	40.	937.	17.	955	50.	917.	17.	935
8. 30.	844.	19.	863	40.	828.	19.	847	50.	812.	20.	832
9. 30.	754.	21.	775	40.	741.	22.	763	50.	728.	22.	750
10. 30.	681.	23.	704	40.	670.	24.	694	50.	660.	24.	684
11. 30.	620.	26.	646	40.	611.	26.	638	50.	602.	26.	629
12. 30.	569.	28.	597	40.	562.	28.	590	50.	554.	29.	583
13. 30.	526.	30.	556	40.	519.	31.	550	50.	513.	31.	544
14. 30.	488.	33.	521	40.	482.	33.	515	50.	477.	33.	510
15. 30.	455.	35.	490	40.	450.	35.	486	50.	445.	36.	481
16. 30.	426.	37.	464	40.	422.	38.	460	50.	417.	38.	456
17. 30.	400.	40.	440	40.	396.	40.	437	50.	393.	41.	433
18. 30.	377.	42.	419	40.	374.	43.	416	50.	370.	43.	413
19. 30.	357.	45.	401	40.	353.	45.	399	50.	350.	46.	396
20. 30.	338.	47.	385	40.	335.	48.	382	50.	332.	48.	380
21. 30.	321.	50.	370	40.	318.	50.	368	50.	315.	51.	366
22. 30.	305.	52.	357	40.	302.	53.	355	50.	300.	53.	353
23. 30.	290.	55.	345	40.	288.	55.	344	50.	286.	56.	342
24. 30.	277.	58.	335	40.	275.	58.	333	50.	273.	58.	331
25. 30.	265.	60.	325	40.	263.	61.	324	50.	261.	61.	322
26. 30.	253.	63.	316	40.	251.	63.	315	50.	250.	64.	314
27. 30.	243.	66.	308	40.	241.	66.	307	50.	239.	67.	306
28. 30.	233.	69.	301	40.	231.	69.	300	50.	229.	70.	299
29. 30.	223.	71.	295	40.	222.	72.	294	50.	220.	72.	293
30. 30.	214.	74.	289	40.	213.	75.	288	50.	212.	75.	287
31. 30.	206.	77.	284	40.	205.	78.	283	50.	203.	78.	282
32. 30.	198.	80.	279	40.	197.	81.	278	50.	196.	82.	277
33. 30.	191.	84.	274	40.	190.	84.	274	50.	188.	85.	273
34. 30.	184.	87.	271	40.	183.	87.	270	50.	182.	88.	269
35. 30.	177.	90.	267	40.	176.	91.	267	50.	175.	91.	266
36. 30.	171.	94.	264	40.	170.	94.	264	50.	169.	95.	263
37. 30.	165.	97.	262	40.	164.	98.	261	50.	163.	98.	261
38. 30.	159.	100.	259	40.	158.	101.	259	50.	157.	102.	259
39. 30.	153.	104.	257	40.	152.	105.	257	50.	151.	105.	257
40. 30.	148.	108.	256	40.	147.	109.	256	50.	146.	109.	255
41. 30.	143.	112.	255	40.	142.	112.	254	50.	141.	113.	254
42. 30.	138.	116.	254	40.	137.	116.	253	50.	136.	117.	253
43. 30.	133.	120.	253	40.	132.	121.	253	50.	132.	121.	253
44. 30.	129.	124.	253	40.	128.	125.	253	50.	127.	126.	253

The Points and Degrees of the Compass Card, to Half-quarter Points; by S. Durr.

Points		D. M. Di. M.		Points		D. M. Di. M.	
North	South	0	1	North	South	0	1
	0. 1.8th	1	24		4. 1.8th	45	0
	0. 1.4th	2	49		4. 1.4th	47	25
	0. 3.8th	3	73		4. 3.8th	49	13
	0. Half	4	97		4. Half	50	37
	0. 5.8th	5	121		4. 5.8th	52	2
	0. 3.4th	6	146		4. 3.4th	53	26
	0. 7.8th	7	170		4. 7.8th	54	51
N. by E.	S. by E.	8	194	N. by W. S. by W.	5. 1.8th	56	25
		9	219		5. 1.4th	57	40
		10	243		5. 1.4th	59	4
		11	268		5. 3.8th	60	28
		12	292		5. Half	61	52
		13	317		5. 3.8th	63	17
		14	341		5. 3.4th	64	41
		15	366		5. 7.8th	66	6
N.N.E.	S.S.E.	16	390	N.N.W.	6. 1.8th	67	30
		17	414		6. 1.4th	70	29
		18	439		6. 3.8th	71	43
		19	463		6. Half	73	7
		20	488		6. 5.8th	74	30
		21	512		6. 3.4th	75	56
		22	537		6. 7.8th	77	21
N.E. by N.	S.E. by S.	23	561	N.W. by N.	7. 1.8th	78	45
		24	586		7. 1.4th	81	10
		25	610		7. 3.8th	82	58
		26	635		7. Half	84	52
		27	659		7. 5.8th	85	47
		28	684		7. 3.4th	87	11
		29	708		7. 7.8th	88	36
N.E.	S.E.	30	733	N.W.	8. 1.8th	90	0
		31	757				
		32	782				
		33	806				
		34	831				
		35	855				
		36	880				
		37	904				
		38	929				
		39	953				
		40	978				
		41	1002				
		42	1027				
		43	1051				
		44	1076				
		45	1100				
		46	1125				
		47	1149				
		48	1174				
		49	1198				
		50	1223				
		51	1247				
		52	1272				
		53	1296				
		54	1321				
		55	1345				
		56	1370				
		57	1394				
		58	1419				
		59	1443				
		60	1468				
		61	1492				
		62	1517				
		63	1541				
		64	1566				
		65	1590				
		66	1615				
		67	1639				
		68	1664				
		69	1688				
		70	1713				
		71	1737				
		72	1762				
		73	1786				
		74	1811				
		75	1835				
		76	1860				
		77	1884				
		78	1909				
		79	1933				
		80	1958				
		81	1982				
		82	2007				
		83	2031				
		84	2056				
		85	2080				
		86	2105				
		87	2129				
		88	2154				
		89	2178				
		90	2203				
		91	2227				
		92	2252				
		93	2276				
		94	2301				
		95	2325				
		96	2350				
		97	2374				
		98	2399				
		99	2423				
		100	2448				

A Linear Table, for Proportional Differences.

Invented, Engraved & Published according to Act of Parliament March 18, 1784, by S. Dime.

If the first Term amounts 500, a half, or third, or fourth, of the fourth Term, is had by the First, & the Overplus under 500, is worked for by this Table.

